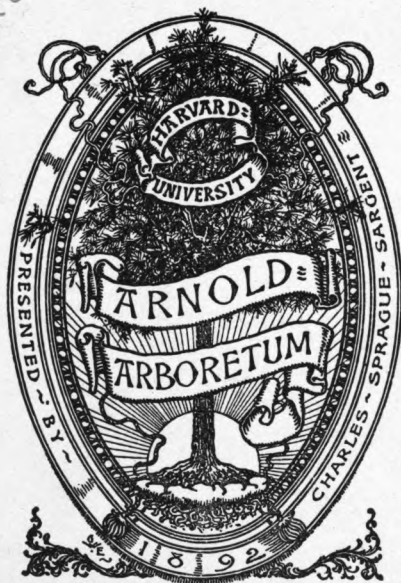


*Cultural directions
for the rose*

John Cranston

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HYBRID PERPETUAL ROSE
Sir Garnet Wolseley

Brooks Day & Son Imp

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CULTURAL DIRECTIONS

FOR

THE ROSE,

WITH FULL DESCRIPTIONS OF ALL THE FINEST VARIETIES IN CULTIVATION,
SELECTIONS ADAPTED TO VARIOUS CIRCUMSTANCES
AND SITUATIONS, AND

A CALENDAR OF OPERATIONS

To be performed during each Month throughout the Year,

BY

JOHN CRANSTON,

KING'S ACRE NURSERIES,

NEAR HEREFORD.

FIFTH EDITION, REVISED.

1875.

34723
Aug. 9, 1923

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PREFACE.

It is nearly twenty years since the publication of the First Edition of CULTURAL DIRECTIONS FOR THE ROSE, and I have now pleasure to introduce the Fifth Edition.

I have endeavoured, so far as lay in my power, to make this a thoroughly practical guide to the amateur in all matters connected with Rose culture, as well as a reliable source from which to make a unique selection.

Great improvement has taken place in the Rose since the publication of the First Edition; I have, therefore, found it necessary to entirely revise the selections. In doing so I have discarded very many old varieties, which at that

iv.

time were indispensable, but now being surpassed by recent introductions, they are no longer desirable or worthy of cultivation.

What experience I have gained in the cultivation of the Rose has been freely and candidly given, and will, I trust, be found of some service to the amateur in the culture of this beautiful and most popular of all flowers.

*Nurseries,
King's Acre, near Hereford,
January, 1875.*

CONTENTS.

PART I.

	PAGE.
ARRANGEMENT OF CLASSES	3
CROSSING AND HYBRIDIZING	47
DIFFERENT FORMS OF GROWING ROSES	5
DISBUDDING	29
DISEASES—Mildew, Red Fungus, &c.	35
EXHIBITING AND CUTTING BLOOMS FOR SHOW	60
FORCING	50
GROWING ROSES IN POTS FOR THE GREENHOUSE, &c.	55
INSECTS	31
LABELS	62
MANURE	18
PLANTING	19
PROPAGATING, by Budding, Grafting, Layering, Cuttings, &c.	40
PROPERTIES OF THE ROSE	59
PROTECTING	30
PRUNING	22
RAISING SEEDLINGS	2
REMARKS ON THE ROSE	1
REMARKS ON CROSSING AND HYBRIDIZING	47
ROSARIUM AND ITS ARRANGEMENT	7
ROSE CONSERVATORIES	57
SELECTING VARIETIES	12
SITUATION	10
SOIL	15
STOCKS—The Dog Rose, Manetti, Celine, &c.	37

PART II.

A SELECTION OF THE FINEST ROSES IN CULTIVATION, WITH FULL		PAGE.
DESCRIPTIONS, &c.		
SUMMER ROSES—		
Alba Rose		72
Austrian Briar Rose		73
Ayrshire Rose		75
Banksian Rose		77
Boursault Rose		77
Damask Rose		72
Double Yellow Rose		74
Evergreen Rose		76
French Rose		68
Hybrid Bourbon Rose		71
Hybrid China Rose		70
Hybrid Climbing, the Musk, and the Prairie Roses.		78
Hybrid Provence Rose		65
Moss Rose		66
Multiflora Rose		76
Provence or Cabbage Rose		65
Sweet Briar Rose		74
Scotch Rose		75
AUTUMNAL ROSES—		
Bourbon Rose		109
China Rose		111
Hybrid Perpetual Rose		81
Macartney Rose		80
Musk Rose		81
Miniature China Rose		111
Noisette Rose		121
Perpetual Damask Rose		80
Perpetual Moss Rose		79
Perpetual Scotch Rose		80
Tea-scented Rose		113

vii.

	PAGE.
SELECT LIST OF SORTS ADAPTED TO VARIOUS CIRCUMSTANCES,	
SOILS, &c.	124
1.—Selection for Town Gardens, where much smoke prevails	124
2.—Selection for the North of England, Scotland, and Cold Localities	125
3.—Selection of One Hundred of the finest varieties of Roses for Exhibition	127
Selection of Fifty Varieties	128
Selection of Twenty-four Varieties	128
4.—Selections for Grouping or Bedding	128
5.—Selection of Climbing Roses for South or East Wall Selection for West or North Wall.	130
6.—Selection of the finest Pillar or Pole Roses	131
7.—Selection of the best Weeping Roses	132
8.—Six of the finest Yellow Roses	132
9.—Six of the finest White Roses	132
10.—Six of the finest brilliant Crimson Roses	132
11.—Six of the finest Dark Roses	132
12.—Selection of the finest Roses for Pot Culture	133
13.—Selection of the finest Roses for Forcing	134
14.—Thirty-six of the finest Roses for growing in Pots for Exhibition	134
15.—Very highly-scented Roses	135
CALENDAR OF OPERATIONS FOR EACH MONTH THROUGHOUT THE	
YEAR	136 to 143
PLANS FOR ROSARIUMS	144

CULTURAL DIRECTIONS

FOR

THE ROSE.

ERRATA.

Page	76	*Laure Davoust, <i>should be</i> *Laura Davoust.
"	83	Adelaide de Rotalier, <i>should be</i> Alpaide de Rotalier.
"	84	*Baronne de Bonstettin, <i>should be</i> *Baronne de Bonstetten.
"	89	*Duhamel de Monseau, <i>should be</i> *Duhamel de Monceau.
"	91	Firbreand, <i>should be</i> Firebrand.
"	94	Lafontaine, <i>should be</i> La Fontaine.
"	97	*Madame Derroux Douville, <i>should be</i> *Madame Derreux Douville.
"	98	*Madame Fillon, <i>should be</i> *Madame Fillion.
"	101	Mademoiselle Philberte Pellet, <i>should be</i> Mademoiselle Philberte Pellet.
"	110	Madame Scipion, Introduced 1872, <i>should be</i> Introduced 1871.
"	127	*Madame George Schwartz, <i>should be</i> *Madame Georges Schwartz.
"	"	Monsieur Pierre Selitzski, <i>should be</i> Monsieur Pierre Seletzski.

Hybrid Perpetual; the summer and the autumnal
blooming; the variations in form, colour, and size,

CULTURAL DIRECTIONS

FOR

THE ROSE.

PART I.

THERE is no flower so well adapted to our changeable climate as the Rose, and certainly none with equal beauty possessing so many valuable properties. In the Rose may be found almost every shade of colour, endless varieties of form, size, &c., a delicious fragrance not to be met with in any other flower, considerable diversity of habit, and a hardiness of constitution that admits of its adaptation to every purpose for which it may be required in the flower garden.

To contrast the wonderful difference existing in the habit and character of Roses, would alone open a subject for long contemplation. Take for instance, the miniature China or Fairy Roses, which grow only a few inches in height, and compare them with the rambling Ayrshire, and other Climbing Roses, which often attain a height of 20 to 30 feet; the characteristic distinctions between the Moss and the French or Gallica Roses; the Tea-scented and the Hybrid Perpetual; the summer and the autumnal blooming; the variations in form, colour, and size,

to be met with in each of these families, are alike equally remarkable, and afford a striking instance of the wonderful works of the Creator.

With so vast a difference as is here to be met with, the almost endless number of varieties is not so much to be wondered at.

With the exception of the introduction of a few distinct species, this work has been accomplished by hybridizing and cross-breeding, and with a flower so very popular as the Rose, and which bears seed so freely, it is natural to suppose that the work of raising seedlings would be taken in hand by all who are fond of this most interesting pursuit.

Little however has been accomplished by English amateurs or cultivators, which has often surprised me; with the French it has been otherwise; and to them we are indebted for nearly all our finest roses; and if we may judge by the quantity of new varieties annually introduced, they doubtless find it profitable as well as interesting.

It may be said, and that justly, that our climate is not so suitable for raising seedlings as that of France, especially in the south of France. This however would apply more to tender kinds, which certainly do not mature their seed thoroughly in this country, unless artificial means are adopted. Nevertheless we have hardy seed-bearing roses in abundance, which are quite as prolific with us as in France, and in favourable seasons ripen their seed as well. My opinion is that if crossing and the raising of seedlings were taken up by English amateurs and cultivators with the same amount of energy which has been dis-

played by the French, the constitution of our roses would be much improved. Of late too many of our new roses have been deficient in two most important properties; viz., freedom of growth, and hardiness of constitution; and it more frequently happens than otherwise that a first-class rose of exquisite form and colour is either of bad habit, or too delicate to withstand our cold seasons. This delicacy has doubtless been produced by crossing the hardier Perpetuals too freely with the Tea-scented and other tender sorts.

In England there would not be the same opportunities offered for crossing with or raising from tender sorts; our seedlings consequently would possess a hardier and more robust constitution, and be better adapted to our cold soil and climate.

The fearful havoc which was made amongst roses, and especially the more tender ones, during the severe winter of 1860 and 1861, will I trust be the means of bringing about a more hardy race, and that all who devote their time to the interesting pursuit of raising seedlings, will not lose sight of these important circumstances. Although we may possibly not have so severe a winter for another generation, it is nevertheless quite necessary (and there is ample room for it) that the habit and constitution of our finest roses should be improved; and never will this be thoroughly accomplished until the task is taken up spiritedly by English amateurs and florists.

Botanists have divided the Rose into sections, and again into species and sub-species, although the

original species of each section is not easily defined, nor in fact has the origin of all been ascertained.

So numerous has been the production of garden varieties, that florists have thought it necessary to make divisions and sub-divisions, taking the original species for the type, wherever it could be correctly ascertained; but in too many instances a slight difference in the leaf or habit, produced by cross-breeding, appears to have justified the adoption of a new section or family. It therefore often becomes a difficult matter to know, even by those well experienced in such matters, how to arrange the varieties correctly according to their respective divisions, and few agree entirely as to the location of certain varieties, which properly belong as much to one class as to another. It will be well, therefore, in all cases where practicable, to diminish rather than to increase the number of families or divisions.

All roses may be included in one or the other of two great divisions, viz., summer blooming and perpetual blooming. The summer blooming are varieties which bloom only once during the season, though they vary as to the duration and time of flowering, some commencing earlier, and lasting only a short time in bloom; others commencing later, and lasting two or three weeks: thus, with a collection of the summer blooming roses, a succession of flowers may be had for five or six weeks.

The autumnal or perpetual blooming roses are such as, in the open air, bloom from June till November, or with the assistance of glass may be had in bloom nearly the whole of the year.

Roses may be grown in a variety of forms, and their habit and character are such as to admit of their being adapted to a variety of purposes in the garden. Hence we have what are called Standard Roses, Half-standard, Dwarf-standard, Dwarf, Weeping, Climbing, Pillar or Pole Roses, Pot Roses, &c.

Standard Roses are usually from four to five feet high. The height of the stem should be adjusted according to the vigour of the variety; the object being to form a head to the plant, which when grown would appear in unison with the height of the stem.

Half-Standard Roses are budded upon stems from two to two and a half feet in height, varieties of less vigorous habit being used than are required for Standard Roses.

Dwarf-Standard Roses have stems from one foot to fifteen inches in height; these are rarely used for other than the most dwarf and delicate growing kinds, such as the dwarf growing Hybrid Perpetual and Bourbon Roses. The Tea-scented Roses succeed admirably upon these low stems, either for planting out or for pot culture.

Dwarf Roses are either budded or grafted upon stocks a few inches in height, or struck by cuttings or layers; this mode of growing roses is suitable to varieties of every description, whatever their habit of growth may be, and may be made to assume various forms.

Weeping Roses are varieties of the Climbing or other vigorous growing sorts, budded upon stems of the Dog Rose, four, five, to six feet in height, and

trained so as to form pendulous trees. These are very beautiful objects, but unless in sheltered situations require to be securely tied to strong stakes, otherwise during a heavy gale of wind they are almost sure to be blown down.

Pillar or Pole Roses. This form of growing roses is considered by many to be the most natural and beautiful. Certainly no plant can be more handsome than a well grown and properly trained Pillar Rose. It is not all roses that can be made to assume this form, and it would be useless to make the attempt with such sorts as are not suitable. To form handsome Pillar Roses six to eight feet in height, such varieties must be chosen as are vigorous or robust in habit, yet not too rambling. Many of the Hybrid Chinas and Hybrid Bourbons are suitable; so are many of the stronger growers of the Hybrid Perpetuals, Bourbons, Noisettes, &c. The Climbing Roses are sometimes used for this purpose, for which they are well adapted, provided the poles are of sufficient height and made thoroughly secure; they should not be less than from ten to twelve feet in height.

A good support for Pillar Roses may be obtained in larch poles, which are very durable; and if they can be procured with portions of the roots attached, these will assist in keeping them firm in the ground. The yew is perhaps the best of all, and certainly no other is so durable. Having occasion to destroy some old yew tree hedges, which had been growing more than sixty years, I had them taken up with some portion of their roots left on, and the

side branches projecting six or nine inches ; these have a very rustic appearance, and the snags which are left on are useful for the purpose of training the shoots tied to them.

Climbing Roses are the most vigorous of all roses, and are used whenever a considerable space is to be covered in a short time. They are very suitable for covering old buildings, rough banks, old roots and trunks of trees, arbours, archways, &c. ; also for avenues and festoons, &c. Some of the best varieties are used for training against houses. Wherever planted, they thrive and make rapid growth, and when allowed to grow in a wild and natural form in dingles or upon sloping grounds, have a very picturesque and beautiful appearance.

Bedding Roses are varieties of dwarf roses which are used for planting in groups or beds. Varieties of the most decided and attractive colours are usually used for this purpose ; and these when planted in large masses (distinct varieties being used for each group) are very effective ; indeed, nothing can possibly be more beautiful than large groups of roses of one kind when in full bloom. Suitable varieties for this, as well as selections for other purposes, will be found towards the end of the work.

THE ROSARIUM AND ITS ARRANGEMENT. The form or design of a Rosarium should be as simple and uniform as possible. A geometrical figure with gravel walks and box or tile edging is best. The beds may be parallelograms, ovals, or circles, arranged according to the form of the ground and other cir-

cumstances. In no instance, however, should the beds be more than seven or eight feet in width, and the walks from four to five feet; if the Rosarium is upon a large scale, and the beds eight feet in width, the main walks should not be less than five feet.

A terrace or mound should be formed upon one or more sides, where the whole can be seen from one point; the effect when viewed from above, when all the plants are in full bloom, is very striking and beautiful, and will amply repay this extra expense. It will likewise form an excellent boundary, which should in all cases be made to separate the rosarium from the other parts of the garden. The beds being of moderate width and a path to correspond, will allow of each plant to be examined, tended, and the flowers gathered without inconvenience, or the beds being trampled upon, which in wet weather would be injurious.

If the situation to be appropriated to the Rosarium is exposed to north-east or north-west winds, an ever-green fence should be planted to afford protection. Though of slow growth (unless plants of large size can be obtained) nothing would harmonise so well, or be so well suited to the purpose, as a yew hedge. A quicker growing hedge would be the *Thuja occidentalis* or *Thuja Lobbi*, which will bear clipping, and will form a serviceable and handsome fence. Walls are very ugly, nor are they nearly so good as hedges. A powerful wind will soon find its way over the highest wall, but a thick fence will break and distribute the current. If walls are used, they should be covered with climbing roses. An embank-

ment or terrace upon one side, and a nicely kept yew fence upon the other three, would have a very pleasing effect.

Some of the choicest evergreens such as the berry-bearing varieties of Aucubas, Daphne, the varieties of Heath, Escallonia, the varieties of variegated and other Holly, Laurestinus, Rhododendrons, &c., nicely arranged and grouped round the Rosarium, have a very pleasing effect, and during the winter season especially add greatly to ornament and take away the bare appearance which during a few months of the year the Rosarium does undoubtedly possess.

In the designs for Rosariums, which are given at the end of this book, groups of evergreens are introduced, and here and there a few choice specimen Coniferæ.

These plans have been designed by one of our best and most practical Landscape Gardeners. No. 1 and No. 5 were laid out and planted last year, and have been very greatly admired.

In the Rosarium every form in which the Rose is capable of being grown can be brought into practice, for instance, pillar or weeping roses can be used with good effect for the centres of circular or oval beds, or for dividing any portion of the ground. Festoons may likewise be formed for the same purpose, and for dividing the summer blooming from the perpetual roses, which should never be mixed promiscuously in a Rosarium. The summer roses having but one season of flowering, would not harmonise well with the perpetuals when the former are gone out of bloom. A separate portion should therefore be appropriated

solely to their growth. A temple in the centre of a Rosarium, when well designed and covered with climbing roses, has a good effect. Climbing roses can also be used as archways at the entrance to the Rosarium, and for arching walks, &c. Groups of dwarf roses can likewise be freely introduced, and with the best effect; in fact with a well arranged design, no roses, of whatever habit or form of growth, need be excluded. Groups of dwarf roses are perhaps more telling and effective when well introduced about the pleasure ground; but here the beds should be of large size, and well brought out.

SITUATION.—This is rather a difficult subject to treat; for every one who has a garden, whether it be in the smoky atmosphere of a manufacturing town, in wet, low, or high situations, must have roses, and indeed what flower-garden is complete without them?

If there is a possibility of choice, select an open airy situation on ground rather elevated than otherwise, in a pure free air, far away from all smoke, and remote from the shade and roots of large trees. In such a spot, with the help of anything like good soil, the Rose can be grown in the highest perfection, and the amateur may treat himself with every variety, whatever its habit of growth may be. But the proportion possessing these favoured localities is necessarily limited: where such localities are not to be had, a greater amount of care and attention will be required in cultivation; and this will be increased in confined situations, and more particularly where there is much smoke.

Nothing is so hurtful to the rose as smoke; this is apparent from the difficulty experienced in growing roses in the immediate neighbourhood of large manufacturing towns. But even here the amateur need not despair, for with a proper selection of sorts and a little extra attention they may be cultivated with considerable success. For such localities, good, hardy, free growing sorts must be selected, freedom of growth with ample foliage being of equal importance to hardiness, and in many cases much more so. Very many of the most hardy roses are so diminutive in growth, that they are less suitable than several of the more tender kinds which possess freedom of growth. It will be well in such situations to have the plants as low standards or dwarfs, and to avoid as much as possible growing them on tall standards. Many kinds do best when grown upon their own roots, or worked low upon the Manetti stock.

In all cases let the syringe be used freely throughout the growing season, keeping the foliage clean and in a healthy condition; for upon this the chances of success mainly depend. Leaves to a plant are as lungs to an animal; so long as they are clogged with soot or filth of any description, proper respiration cannot go on, and the plant will soon decline and die. Apply the syringe morning and evening, and adopt every possible means to keep up a healthy growth. Syringing during the growing season will also assist in keeping down the green fly.

In Part Second will be found a select list of varieties best adapted for growing in the neighbourhood of towns. When, however, the more tender

kinds are desired, recourse must be had to conservatories, greenhouses, or other glass structures: the plants may either be grown in pots, or planted out in prepared beds or borders.

Low damp situations with a wet soil are also most unfavourable to roses, but by draining and slightly elevating the ground these evils may be overcome, and good roses can be grown; but to attempt to grow them in such situations without first of all providing efficient drainage is labour in vain, and nothing but disappointment can be the result.

High situations not too much exposed to high winds, are favourable to the growth of roses, and the tender kinds are less injured by frost than in low grounds; but the prevalence of high winds is hurtful as well as troublesome, and where these are common, screens of plantations or fences should be contrived, and no plants higher than half-standards grown.

SELECTING VARIETIES. This is a most important matter, though rarely attended to, and is, I doubt not, a more frequent cause of failure to the amateur than any other. The first thing the amateur generally does is to fix upon the varieties he wishes to grow, and for this purpose the catalogue is taken in hand, and those varieties described as being the most beautiful and perfect in form are chosen, without any regard to the habit or the hardiness of the kind, or the nature of the soil in which they are to be grown. Their destination may be a smoky atmosphere and a light porous soil, or perhaps a cold, wet, tenacious soil, in combination with a

damp atmosphere. In many instances the sorts which are chosen are not at all suited to the soil or the climate, their constitution possibly being of the most tender kind, and such as should only be grown in the most favourable soils and situations; the result is, as may be expected, that nearly the whole of them die, or, if they survive the operation of planting, fail to produce a bloom, and are quite gone before the next season comes round. The amateur of course is much disappointed, and wants to know "the reason why" his roses do not grow; and not unfrequently the nurseryman is blamed for having supplied poor plants, and has to take the whole brunt of the burden upon his own shoulders. Now if due precaution had been exercised in selecting varieties of good constitution, suited to the situation where they were to be grown, the result would have been totally different. There are hundreds of fine roses which will grow in almost any soil with an ordinary amount of attention. It may be said that it is impossible to gain this information and to make a suitable selection from a printed catalogue with a voluminous list of names, a part only of which are fully described, or sufficiently so to enable the amateur to make a satisfactory selection which would in every instance suit his purpose.

Being quite prepared to admit that there is some truth in this objection, it will be my object to remove, as far as possible, the difficulty by which the amateur is beset; this was, in fact, the chief object I had in view when I first contemplated the publication of this little work. To accomplish this,

I shall not only give a select list of sorts adapted to certain soils and climates, but selections for every purpose to which the rose may be appropriated, either in the flower-garden, conservatory, or forcing house ; likewise a descriptive list of every rose worthy of being placed in a collection, which has been introduced up to the present time.

Another important matter to be attended to in making selections, is to apportion the height of the stock upon which the plant is to be grown to the habit of the variety. We frequently see tender, dwarf, and weak growing sorts budded and grown upon tall standards three to four feet in height, and often more ; when so treated they always do badly, and, even if they live, look meagre and out of proportion. A standard plant, to look well, should form a head sufficiently large to appear in unison with the height of the stock ; or, in other words, the diameter of the head should equal, as nearly as may be, the height of the stem. Let the vigorous and free-growing kinds, therefore, be worked on full standards, and the moderate and dwarf kinds as half-standards, dwarf-standards, and dwarfs : it is an established fact, that, when adapted in this way, the weaker growing kinds do infinitely better than in any other. It is also necessary to determine in what form and to what purpose the plant is to be grown ; and to carry out this satisfactorily, it is important that such sorts are selected as will attain the desired object. For instance, it often happens that sorts are fixed upon to be grown as pillar or pole roses that will not attain a height of three feet

in as many years; and the same may be said of wall roses, bedding roses, or for whatever other purpose they are intended. Proper selections for the object in view must in every instance be made, and to do so it will be necessary that the habit and character of the variety be previously ascertained.

SOIL. The Rose is capable of being grown in a variety of garden soils, but that is best which contains the greatest proportion of loam; and a deep stiff loam is what roses most delight in. The worst of all is the black porous soil usually met with in town gardens, and which contains a superabundance of humus or decomposed organic matter; here the rose will rarely thrive without a liberal admixture of stiff loam, or even clay. Sharp gravelly, and light sandy soils are also bad for roses. In many localities, and especially by the sea side (where the latter usually prevail), it is often a difficult matter to grow any but the most robust and free growing sorts. Rich peat soils are not at all unfavourable; and good roses may be grown in boggy soils, provided they are thoroughly drained. There is however no description of soil to equal a deep rich loam, rather retentive than otherwise, having somewhat of a greasy tendency; and if such is well drained, there will be little or no difficulty in growing the most choice and delicate roses. As, however, all cannot possibly possess these advantages, we must suit our roses to the soil, and our soil to the roses as best we can; and so happy and ready is the rose to yield to our will, and to become attached to our soil and

locality, that little difficulty will be experienced in improving what Nature has given us to its advantage.

I will now make a few observations on the preparing of soils. Commencing with loamy soils,—the first thing to look to in this, as well as all others, is to see that it is thoroughly drained. This matter is of so vast an importance to the cultivation of plants of every description, and now so generally acknowledged and understood, that few gardens or new grounds are now made without this first and all-important work being well carried out; therefore it is necessary to be done in cases where it has been previously neglected.

After being assured that the drainage of the soil is perfect, let the ground intended for the Rosary be trenched to the depth of two feet, and thrown up into ridges as the operation proceeds. If this is performed in the autumn, a few frosts and drying winds during winter will soon make the stiffest soil friable and in good working condition; when it has become dry, mellow, and pulverised, let it be levelled down and formed into beds, or otherwise properly arranged for the reception of the plants. Good rotten manure will then be all that will be required to be added, and of this let a good thick dressing be well incorporated with the soil where the plants are to be planted.

With ordinary black garden soils spoken of as prevalent in town gardens, mix the stiffest loam that can be procured, and less of stable manure, for this latter will tend to lighten the soil which we want to make as stiff as possible. If the loam has a ten-

dency to clay, it will be all the better; and instead of stable manure let liquid manures be used during the growing season. This kind of soil should be trodden as firm as possible, and the plants would be greatly benefited by a mulching of manure placed upon the surface.

Gravelly soils will require to be loosened to the depth, if possible, of eighteen inches, but should the subsoil be of a very gravelly nature it should not be brought to the surface; this description of soil soon eats away or exhausts a quantity of manure, hence the term "a hungry soil:" liberal dressings must be given, and those which are the most lasting and cooling are best, such as cow dung and pig dung. A mixture also of stiff loam and decayed vegetable matter of any kind will greatly improve them.

Sandy soil will require somewhat similar treatment as the above, but if very light and shallow, will demand a greater abundance of loam, or clay would be preferable. They would also be greatly benefited by having the manure placed upon the surface, which would prevent excessive evaporation during hot weather. Whatever manure is mixed with the soil should be well decayed, and if possible use cow dung or night-soil. The soil should be loosened to the depth of eighteen inches, and the loam or clay mixed with it to the depth of twelve or fifteen inches; afterwards make it as firm as possible.

Peat and bog soils are both much improved by an admixture of loam. Trench as recommended for loamy soils. Burnt clay may be here used with the greatest advantage. Indeed it is serviceable to

every description of soil, and perhaps few materials improve old worn out soils so much as burnt earth, wood ashes, and wood charcoal.

In low, damp situations it will be well, in preparing the ground, to elevate the soil in the beds six or eight inches above the surface level. In the bottom of the beds, a layer of old mortar and brick-bats, placed a few inches in thickness, would tend to keep the soil drier, and consequently less liable to become sodden.

In preparing for the Tea-scented and China Roses to be grown upon their own roots, a little more care and forethought will be necessary, not only in the preparation of the soil, but also in the situation to be chosen. A warm south border in front of a greenhouse, vinery, or wall, is to be preferred. If such cannot be had, and there be no alternative but allowing them to take a place with other rose beds upon the lawn or in the Rosary, let there be at least six or eight inches of drainage in the bottom of the beds, consisting of any rubble at hand. In stiff loamy soils use a liberal quantity of sand and leaf mould, and let the soil, in every instance where roses are to be grown upon their own roots, whether Tea-scented, Hybrid Perpetual, Bourbon, or otherwise, be made more friable and less retentive by a liberal admixture of leaf mould, sand, and well rotted manure.

MANURE. I have found, after repeated trials for some years, that pig dung is the best of all manures for roses; next night-soil, cow dung, and horse dung;

these should stand in a heap from one to three months, but not sufficiently long to become exhausted of their ammonia and salts. Pig dung should be put on the ground during winter or early spring, and forked in at once. In using night-soil, mix with burnt earth, sand, charcoal dust, or other dry substances. Apply a small portion of the mixture to each plant or bed during winter, and let it be forked in at once. Soot is a good manure, especially for the Tea-scented and other roses upon their own roots, so are wood ashes and charcoal. Bone dust, or half-inch bones, form an excellent and most lasting manure : a liberal mixture with the soil, in preparing beds for the Tea-scented, China, or other kinds upon their own roots, is most beneficial. Guano and super-phosphate of lime are both good manures for roses, but require to be used cautiously : if too freely applied, the result will be gross wood and foliage to the injury and sacrifice of the bloom. Perhaps the better way to apply them is in a liquid state, and then, when judiciously employed, they are most beneficial, particularly upon light, sandy, and gravelly soils. Liquid manures of all kinds should be used in the spring when the plants are in a growing state, and again to the perpetuals after the first bloom is over. The drainage from dung heaps and stables is most efficacious, and good liquid manure may be made with either horse, cow, sheep, or pig dung.

PLANTING. All kinds of roses which are worked upon the Briar or other stocks, may be planted in

the autumn, say from the beginning of October to the end of December; but where grounds cannot be so early prepared, or the weather is too wet for planting at that season, it is better to defer it until February. In very many instances it will be found absolutely necessary to do so, and this delay will be far preferable to planting when the ground is at all wet, or not otherwise in proper condition to receive the plants. I believe that with proper management equally good results are obtained in both instances, though some prefer the autumn, and others the spring; but by no means let it be deferred later than the middle of March with the hardier and worked kinds, otherwise many failures and much weak growth will be the result, for no plant suffers more from late planting than the Rose. The Tea-scented and other tender kinds should not be planted out before the end of March.

Plants upon their own roots, whether Tea-scented, China, Hybrid Perpetual, or Bourbon, should never be planted out before April. It is not unfrequently the custom with many amateurs to plant all their roses, whether worked plants or otherwise, at the same time; the result is that those upon their own roots, if planted in the autumn or during winter, are almost sure to perish before spring. As soon as these latter are received, let them be placed in a cold frame, or plunged underneath a north wall or hedge, where they can be screened and protected during the more severe weather.

It may not be out of place here to mention that all who are about to purchase plants should do so as

early as possible in the autumn : even if the plants are not required for planting till the spring, it will nevertheless be better and indeed necessary to do so in order to secure good plants ; for if deferred until the spring, the chances are that many of the newest and best kinds have been sold out, and as a matter of course the best plants have been selected for the earliest orders.

As soon as the plants are received from the nursery, let the roots be examined and all injured portions and sucker roots removed ; also shorten the long fibrous roots ; by no means allow the roots to become dry, but have them put into the ground as quickly as possible, and there let them remain until required for planting. All the Tea-scented, as well as the more tender varieties of the Noisette, should be put in beneath a wall where they can be protected by hanging a few mats before them during severe frosty weather ; here they can remain until all frost is over, say till the beginning or end of March, when they can be planted out wherever required. All hardy sorts may of course be planted out on the first favourable opportunity that offers after the ground is prepared.

Endeavour to choose a fine day ; let the soil be sufficiently, though not too dry, this will be indicated by its being moist without sticking to the spade or shoe. Prepare the soil as previously recommended, then make the holes to receive the plants sufficiently large that the roots may be spread evenly and to their full extent ; but on no account allow those which are budded upon the Briar stock to be planted

too deep. Level the whole of the soil in, shaking the plant during the operation so that the soil may pass well amongst the roots; then tread the mould firmly, holding the plant in one hand to prevent it from sinking deeper into the soil.

Dwarf Roses which have been budded upon the Manetti, Celine, or Boursault stocks, will require to be planted deeper than is usual or well to do with sorts upon the Dog Rose or common Briar; they should, in fact, be planted so that the collar of the bud is entirely beneath the soil; and they will not succeed perfectly if this is not carefully attended to. The plants which are grown upon the Manetti stock are either budded or grafted quite low, to allow of their being planted so that the union of the bud with the stock may be readily covered. Let all standard roses which are two feet in height and upwards, be securely fastened to stakes, to prevent their being disturbed by the wind.

PRUNING. This operation will require to be performed during February, March, and April. At the time of pruning it is necessary to have in view the proper formation of the tree, so that when grown and in bloom it may assume the form desired. When fully grown it should appear equal on every side, somewhat conical, but wider at its base, so that when viewed from different positions it should present a uniform appearance, and when in bloom every flower should be seen, and not hidden by leaves or shoots growing before them; neither should the tree

*Prune the end of April, Tea roses; or if in Staffordshire, the middle of May,
it hardly goes down to good wood. Journal of Horticulture*

be at all crowded, but each shoot should stand out at equal and regular distances.

I know it will be found somewhat difficult to obtain a proper and uniform shape with all kinds; there are some which will, in spite of all pruning, grow as close in the head as a besom, others will start off anyhow, one shoot frequently taking the lead, and if allowed will grow to such an extent as to entirely rob all other parts of the tree, the plant soon becoming a one-sided rambling-looking object. To avoid this, examine at pruning time all such trees as are liable to grow into this form, and cut out entirely any shoots which are observed to be gross and over robust. All shoots left after pruning should be as nearly equal in size as possible, this will ensure uniformity of growth upon all sides. If however, as is sometimes the case, a vigorous and gross shoot should appear which cannot well be dispensed with, it should be stopped when it has grown six or eight inches; the lateral shoots afterwards produced may be again stopped when two or three inches in length.

The erect-growing kinds are again somewhat difficult to bring into shape, as no pruning will prevent their growing into a close compact head, with the flowers all at the top of the tree, so that they cannot be seen on a moderately tall standard; such sorts are best grown as low bushes, or as standards of medium height. During the growing season when the shoots have become sufficiently hardened to bend without breaking, let the lower shoots be brought down and tied to small wooden or iron hoops placed underneath the head of the tree, and in

like manner bring the middle and upper shoots down. After this has been practised for about two seasons, the plant will have assumed a proper shape, and then can easily be kept so, and that without the assistance of the hoop or further tying.

Before commencing to prune, it is necessary to observe the habit of the plant, whether it be a vigorous, moderate, or dwarf growing variety; also to determine what kinds are required for exhibition purposes, as these will want somewhat more careful pruning and thinning. Carefully thin out from the head of the plant, by clearing away all small and crowded branches, likewise all gross unripe shoots, leaving such only as are composed of firm and well ripened wood, and these at regular and equal distances. Prune down according to the strength of the shoot and habit of the variety, in some cases to two or three inches, in others, where the habit is vigorous, one foot or even eighteen inches will not be too long for a shoot to be left; but as this will depend upon the habit of the variety, and the shoot to be pruned, no absolute rule can be given. In shortening the shoots cut close to an eye, observing, where practicable, to leave well swollen plump buds, which invariably produce the finest blooms; likewise secure those having an outward tendency, and pointing in a direction proper for the handsome formation of the plant.

Commence with the most hardy sorts, such as the French, Moss, Alba, Provence, Damask, and Austrian roses. These for the most part have dormant looking buds, and being less active than others, take

a longer time to develop them, and being perfectly hardy, are not so liable to be injured by spring frosts should they happen to start prematurely into growth. With few exceptions, the whole of the varieties in the above five classes are of uniform and moderate growth, and many of the Moss, as well as the French, are dwarf in habit, producing short-jointed firm wood, with rather dormant looking eyes. All such sorts will require what is termed "close pruning," that is, the shoots of the previous year's growth being cut down to within an inch or two of the old, or two years' wood, leaving only two or three eyes at the base of the previous year's shoot; these will throw out one, two, or three shoots, with trusses or single blooms at the end of each. To form a conical-shaped plant, prune the centre shoots rather closer than the outer and lower ones, the centre will then grow up in advance of the sides, and give the plant a pyramidal shape. The vigorous growers in these classes will require a moderate pruning, say for the stronger shoots six inches, and for the weaker ones four inches.

The Hybrid China and Hybrid Bourbons are mostly very vigorous growers, and require more care in pruning than most sorts. An acquaintance with the varieties is necessary to enable the operator to prune these successfully. Many of the most vigorous often produce shoots six and seven feet long in a season, which if pruned close, as recommended for the French and others, would not produce a single flower. These vigorous growers must be well thinned, and the strongest shoots left two feet in

length and upwards, and the weak ones from one foot to eighteen inches. There are some sorts, such as *Blairii*, *Triomphe de Bayeux*, *Brennus*, *Fulgens*, and a few others, in which the vigorous shoots may be left nearly their full length; and to make them bloom abundantly this is often necessary. For the moderate growers in these two classes, six inches to one foot will be about the average length.

It will be found that after long pruning has been repeated several years, the plants will have become somewhat exhausted; in fact many of the shoots which at first grew five or six feet, will now be often less than eighteen inches; consequently to give the plant more strength, it will require to be pruned down somewhat closer than was first recommended. In the course of years the plants which have undergone the long pruning system will possibly become leggy, overgrown, and somewhat unsightly in appearance. It will therefore be found necessary, when such is the case, to cut them back hard, so as to form entirely new wood and better shaped heads. Cut into the old wood as far back as may be thought necessary, new eyes will soon form, even in wood five or six years old, provided the plant is in good health; by this means well furnished plants with young wood are reproduced.

The Austrian Briar Roses require a system of pruning peculiar to themselves; if pruned as recommended for moderate or close pruning, they will produce but few if any blooms. Therefore such as are required to bloom must be left unpruned, with the exception of a little thinning, and merely the

ends of the shoots being taken off. This treatment may be continued from year to year with the *Harrisonii* and a few others, but the *Persian Yellow* to be kept in vigorous health must be pruned down hard every alternate year, otherwise it will soon become exhausted. When this is done, of course no blooms are produced until the following season; it is well, therefore, to grow several plants of this kind, pruning a few each year. Like other roses that are required to form fine and handsome heads, they must be shortened down to four or five buds the first season of planting.

The Hybrid Perpetual, Damask Perpetual, Perpetual Moss, and Bourbon Roses may be pruned from the beginning to the end of March. By pruning a few at the beginning and others towards the latter end of the month, the blooming season will be prolonged; and the same result may be obtained by adopting this system with the summer blooming as well as all other kinds. The varieties of Hybrid Perpetual Roses are so numerous, that there will naturally be found a very great difference in their habit of growth, some being quite dwarf, others robust, and a few even sufficiently vigorous to form pillar or pole roses. The dwarf, as well as the more moderate growers, will require to be pruned down to two or three eyes, the weak and crowded shoots to be taken out. The robust will require the same thinning out of superfluous wood, while the strong shoots must be pruned down to six or eight inches in length, and the smaller ones to four or five. As all perpetual roses produce blooms upon every, or

nearly every shoot, it will be no difficult matter to prune these so as to have a continuous show of blooms; but to have flowers of good size and quality, as well as to keep the plant in proper form, some little judgment must be exercised. The Damask Perpetual and Perpetual Moss may be pruned as recommended for the Hybrid Perpetuals. The Tea-scented, China, and Noisette are the last sorts to be pruned, and should not be commenced before the end of March or beginning of April. Few if any of these require close pruning. The Tea-scented and China especially should not be pruned too hard; thin out the small weak wood, and shorten the other shoots one half, and in some instances even less. The vigorous growing Noisettes require long pruning, the strongest shoots being left even longer than recommended for the vigorous growing Bourbons.

The Cloth of Gold Rose belonging to this section, is one of the most shy blooming of all, and yet one of the most beautiful. Its situation when intended to be grown out of doors should be against a south wall, it will then, if grown freely, bloom after the first year or two; very little pruning, however, is required, the secret of making it bloom is to get it to grow freely, and for this ample space must be given. When it has become established, and is making vigorous growth, it will bloom both in summer and autumn: it must, however, be manured highly every year, and no more pruning given than will suffice to keep the plant in a well trained form. I have had standard plants of this rose of unusually large size, and with nearly a hundred expanded

blooms at one time; but of late years the severe winters have somewhat discouraged any attempt at growing it otherwise than against a south wall or in the conservatory.

Banksian Roses produce their blooms upon the small, weak, one and two years old wood, but rarely until the plant has been established some three or four years, and their vigorous growth has become somewhat exhausted. Whatever pruning is necessary should be performed after the plant has bloomed, which is generally towards the end of May or beginning of June. Shorten the long vigorous shoots one-third or less, and secure all the small, short-jointed, and thoroughly mature wood; from these blooms will be produced the following season.

DISBUDDING. Next to pruning, disbudding must be considered the most important operation to be performed. After the shoot-buds are fairly started, look through the plant, and rub off or cut out any which are likely to take a wrong direction, likewise thin out wherever they are too much crowded. It will be found in some instances that at least one-third of the shoots may be dispensed with, which if allowed to grow would crowd the plant with small useless wood. By lessening these, such as remain will consequently be much strengthened, producing finer blooms, and the plant will assume a well regulated form, requiring much less attention at pruning time.

Young plants require in all instances to be cut down the first year to within a few inches of the

insertion of the bud, leaving from four to six eyes, according to circumstances. This must be done to all alike the first year of planting. I mention this more particularly, because I have repeatedly seen one-year old roses planted and allowed to grow without receiving any shortening or pruning whatever. The proper time to cut them back is early in spring, as soon as the sap rises and the buds are observed to be swelling. When the shoots are very long, it will often be necessary to shorten them a little at the time of planting, so as to prevent them from being blown about by the wind. But never allow them to be pruned closely down when newly planted.

PROTECTING. Nearly the whole of the Tea-scented, China, and Noisette Roses will require protection during winter. Some of the most hardy will not require it unless the weather is very severe. The best and surest method to adopt with all the tenderest budded roses grown on standards, is to have them taken up about November and planted underneath a south wall; here they can be readily and easily protected during severe frost. The plants being put in closely together, a few mats nailed to the wall will suffice to cover them. The mats need only to be put on during severe frost, but should it continue any length of time, an extra covering should be provided with additional mats or straw. For the tender sorts upon their own roots, which need not be taken up, a good protection is afforded by half-decayed leaves placed two or three inches

thick upon the surface of the beds. Moss may be used instead of leaves, but should be pegged down or otherwise secured, to prevent the wind from blowing it away. A few fern branches will be sufficient protection for the head, as the loss of the top part of the plant is not of much importance; provided the roots and the lower part or crown are preserved, there will generally be found a sufficient number of young shoots emitted from below. Very many of the most tender roses which were growing upon their own roots, or budded quite low, were saved during the very severe winter of 1860 and 1861, and their preservation can be attributed to no other cause than the protection which was afforded to their roots and the lower part of the plant by a thick coating of snow which lay upon the ground nearly the whole of the winter. I saved a great portion of my roses which were grown in this form, or budded quite low upon the Manetti stock, whereas others which were budded five or six inches in height, being above the level of the snow, were totally killed.

INSECTS. There are very many insects which are injurious and destructive to the Rose, but none more so than the Green Rose Chafer or Golden Rose Beetle, and the Antler Rose Sawfly, both of which feed upon the young leaves, shoots, and buds.

In the *Book of the Garden* we have the following excellent description of these two insects:—"The Green Rose Chafer or Gold Rose Beetle (*Cetonia aurata*,—*Scarabæus auratus* of some entomologists) is

one of our largest and most beautiful beetles, easily recognised by its bright green colour; sometimes reflecting a rich golden or copper tint. The wings are very long, of a brownish colour, folded under the horny wing cases, which have a few white lines placed transversely, resembling cracks, and scattered over them. On the under side they are of a fine copper tint, sometimes inclining to rose-colour. The horns are short, the scutel forming an elongated triangle. They are readily found enveloped in the petals of the rose, and from their colour and size cannot be easily overlooked. The havoc they make in the Parisian rose-gardens is fearful, compared with what we experience in Britain. *Le Ver Blanc*, as they are there called, is the greatest enemy the French rose growers have to contend with. Their habits in many respects resemble those of the Cockchafer. We know of no means more likely to reduce the numbers of these rose-chafers than by capturing them in their beetle state, which, from their large size and conspicuous colours is no difficult matter.

“The Antler Rose Sawfly (*Cladius difformis panza*). Several species of *Cladius* attack the rose in their larva state, devouring not only the foliage but often the pith also. Their attacks on the foliage are first observed in the shape of innumerable small perforations, which daily increase, portions of the margins being also devoured. The cause of this is only discovered by turning up the underside of the leaf. In size they scarcely exceed half-an-inch, nearly cylindrical, tapering a little towards the tail. Their

colour is bright green, covered with short erect hairs, with a darkish line down the back, and one much darker on each side; the head is brownish and horny, with two small black dots on the sides. It is difficult to point out any remedy except what has so often been recommended for caterpillars in general, viz., dusting the plants with powdered hellebore or with snuff, watering with lime or soot-water, shaking the branches suddenly and catching the enemy on a cloth spread below.

“ Another destructive insect is the Sawfly of the Rose (*Selandria Ethiops*). During the month of June, the leaves of the rose trees are often found assuming a withered brown colour, as if scorched by fire. The cause of this may be traced, by the aid of a microscope, to the destructive effects of this insect. The upper cuticle of the leaf will be found nearly eaten away, while the under side remains perfectly entire. A closer examination will show the enemy itself, in colour so nearly resembling the foliage that its detection by the naked eye is almost impossible. In its larva state it is nearly half-an-inch long, of a cylindrical form, with a dark line down the middle of the back. The head is orange coloured, with a small black spot on each side. The larvæ change their skins several times before arriving at their full size, and then descend into the earth, where they form elliptical cells, highly polished on the inside, in which they pass the winter, and in which they become transformed, first into the pupa state and afterwards, towards spring, into perfect insects. Syringing the roses with water in which hot lime

and soot have been steeped, is one of the best remedies for the suppression of all tender skinned insects on roses and other plants."

The Rose Aphis (*Aphis rosæ*) is a great pest amongst roses, and especially in situations where air cannot circulate freely amongst the plants; in such confined places much difficulty is often experienced in keeping these troublesome insects under, and generally the weakest and most delicate sorts are those worst attacked. Numerous recipes are given for the destruction of these aphides, but whatever means are adopted should be taken in time, and before the plants get smothered with them. I have found the following remedy answer in every instance where applied. To one pound of tobacco and two pounds of soft soap add six quarts of boiling water; let this stand a short time, then strain through a piece of coarse canvas; to the filtered liquor add nine or ten gallons of water, and with this diluted fluid syringe the plants infested, or otherwise dip the branches into it, wetting the whole of the foliage; if necessary repeat the operation two or three times, always syringing the plants over afterwards with clean water. A decoction of quassia is frequently used, in the proportion of one ounce of the chips to one quart of water. Fowler's Insecticide is also an effectual remedy for destroying the Green or Brown Aphis. Fumigating with tobacco is perhaps the best and most effectual way of destroying them where appliances can be had so as to confine the smoke. In hothouses and greenhouses this is readily done, and is the best means that can be adopted.

Aphis Vastator.—This, the rose cultivator's friend, should never be destroyed; it feeds upon and destroys all other aphides, and is a most valuable ally for such purposes. The ladybirds are also useful in destroying these small insects, so are many kinds of birds, and none more so than the so-called mischievous tomtit and sparrow. The sparrows are especially valuable; not only do they feed upon the aphides, but the rose-chafer and other enemies to the Rose. I have often watched their early morning avocations amongst the roses; a dozen or two sparrows will clear some thousands of insects during the day, and woe be to the rose-chafer that comes within their sight.

DISEASES.—*Mildew*. This fungus is the most troublesome of all diseases to which the Rose is subject, and of late years has been much more prevalent than formerly. The late Mr. Knight in writing upon it says, "The secondary and immediate cause of this disease has long appeared to me to be the want of sufficient moisture from the soil, and excess of humidity in the air, particularly if the plants be exposed to a temperature below that to which they have been accustomed. If damp and cloudy weather in July succeeded that which is warm and bright, without the intervention of sufficient rain to moisten the ground to some depth, the crop is generally much injured by mildew."

There can be no doubt as to the truth of these observations, but latterly this disease appears to have become more prevalent, and seems to baffle all our

skill even to ward it off, much more to eradicate it. Some sorts of roses are much more liable to it than others, and some are even so badly affected by it that it is next to impossible to keep them in health and free from it throughout the season. A good remedy is flour of sulphur. This should be applied the very moment the least sign of the disease makes its appearance, otherwise it will not arrest its progress. The best instrument for applying it is the sulphurator; this excellent little machine will distribute it evenly throughout every part of the plant, which it is almost impossible to do with a dredger. If the dredger is used, syringe the plants over with a little water, and apply it to every part affected. The sulphur should not be applied to the young foliage whilst the sun is powerful, or it will sometimes be injurious; no harm will result from applying it in the evening; it may remain on for a day or two, when it should be syringed off. Where the sulphur has failed to arrest its progress, Fowler's Insecticide has been applied, and with wonderfully good effect. The quantity used has been from two and a half to three ounces to the gallon of water. The plants affected are syringed or well wetted with the mixture, and if the shoots are at all tender they must be syringed over with clear water in a few hours afterwards. One or two applications, in most instances, will be sufficient, but when the disease has been allowed to establish itself, it must be applied weekly until it is cured. Various nostrums are frequently advertised and recommended for this disease, but I should advise all to be cautious what they apply

to their roses, or the remedy will oftentimes prove worse than the disease.

Red Fungus—or rust, as it is sometimes called, seldom appears before August, or until the wood and foliage are pretty well matured; its consequence, therefore, at this season is not of much importance, nor is the damage at all serious. It should, however, be prevented by the application of sulphur, as recommended for the mildew; or fresh slacked lime to the parts affected will in some instances destroy it.

Green centres. These must be considered a disease, though prevalent only among certain sorts of roses. Its cause may be attributed to too much manure, or the use of it in a raw or green state. This should be avoided with all kinds subject to this disease, and where manure is applied let it be thoroughly decayed.

Stocks. Roses are grown upon several varieties of stocks; those most in use are the Wild Dog Rose, Manetti, Céline, and the Black Boursault. The Dog Rose procured from hedgerows and woods is the only suitable kind upon which standard or half standard roses can be grown. For dwarfs, or dwarf standards, the Manetti and Céline are preferable, especially for light soils. Stocks for budding should be procured in the autumn, the roots pruned close, and the stem shortened to the height required. Standards will require to be left three to four feet in length, half standards two to three feet, and dwarfs six to eighteen inches. These should be planted out in rows three feet apart. The following summer they will be fit for budding.

manetti

The Manetti is a vigorous variety of Hybrid China Rose, introduced nearly thirty years ago from Italy, by Mr. Rivers. For dwarf roses this stock is superior to all others; it is alike suitable for stiff, as for light soils. In many light shallow soils, where the Dog Rose will scarcely live, this succeeds admirably. It is very hardy and enduring, and will last as long as, or perhaps longer than, any other. It requires, however, somewhat different treatment to other stocks, both as regards its preparation before as well as after budding. My practice is to prepare the cuttings in the autumn, say from nine to twelve inches in length, taking out all the eyes excepting three at the top of the cutting; they are then planted six to eight inches deep, here they remain until the following autumn, when they are taken up and planted out into rows, from eighteen inches to two feet apart. The following summer they will be fit for budding; this is done by inserting a bud in the stem which formed the cutting an inch below the surface, the soil being previously cleared away to enable the operation to be performed. The following spring when the bud shows signs of starting in growth, cut down the upper part of the stock to within an inch of the bud; by the end of the summer they will have formed fine large plants. When the plants are taken up to be transplanted into the rosary, it will be necessary to plant them quite over the collar of the bud, so that the union of the stock and bud is quite covered; the plants being budded so very low, there will be little difficulty in planting them thus.

This stock, be it observed, is not adapted to stan-

dards or half-standards, or in fact to any other than dwarfs treated as described above. There are few roses which refuse to grow upon it. Since the introduction of this stock, roses upon their own roots (excepting the Tea-scented and China) have not been so much sought after, for the reason, that to have a bed of roses upon their own roots, well filled and in good blooming condition, requires two, if not three years before it can be accomplished, whereas, with the same sorts budded upon the Manetti stock, a fine bed can be obtained the first year of planting, with perhaps double the quantity of bloom that would ever be produced by plants grown upon their own roots.

For pot culture this is also a valuable stock, it is also the best to use for grafting purposes. For Pillar Roses it is remarkably well adapted. Strong growing kinds will often grow from six to eight feet the first season, and will ultimately make the finest plants possible. I have some examples of pillar roses, both summer and perpetual, which are eight to ten feet in height, and beautifully furnished from the bottom upwards. The *Persian Yellow* and *Harrisonii* may be instanced as two summer roses, forming large and beautiful pillar roses, resembling more the size of young apple trees than roses. I am so satisfied of the superior merits of this stock over all others, that I grow annually upwards of 200,000; and this opinion is not based upon my own experience in this locality, so much as on the opinion of others in various parts of England, Scotland, and Ireland, wherever plants have been distributed.

The Céline is a variety of the Hybrid Bourbon

rose, it is very robust in habit, and forms a most excellent stock for many kinds of roses, but more especially for Noisettes and Bourbons. The *Cloth of Gold* grows and blooms more freely upon this than upon any other stock with which I am acquainted.

The Black Boursault is sometimes used for the Tea-scented and a few other sorts; it is, however, not so lasting, nor so good as either of the preceding. It is, perhaps, better suited for light than heavy soils, where it may possibly answer for many purposes.

The cultivated Briar Stock—this is the wild Dog Rose, raised either from seed or cuttings, the latter perhaps are preferable; seedlings are objectionable on account of their propensity for spawning or throwing up suckers from the roots.

There are some who advocate the use of this stock in preference to all others for dwarf roses, it has been in use here for very many years, and has been found useful for working some of the Tea-scented and Noisette Roses, but as a stock for general use, it is not in any way equal to the Manetti.

PROPAGATION. Roses are propagated by budding, grafting, cuttings, layering, and by suckers (either or all of these modes are in practice for the purpose of increasing a given variety); and by seed to obtain new varieties.

Budding. This is by far the most ready and easy system by which the Rose can be propagated, and is that most generally practised. It offers many advantages over other modes of propagating, as by its adoption a weak kind is increased in vigour, by

bringing it to grow upon a stock which is more hardy and more vigorous in habit. By adopting this mode of propagating, roses are wrought into a variety of forms which otherwise could not be done.

The mode of operation is so simple, and has been so often described that a few words will suffice by way of explanation. The usual time for budding is July and August, but the proper time to be chosen must be determined by the state of the scion, as well as the stock which is to be budded. In no case will it answer to bud until the sap flows freely both in the stock and the plant from whence the buds are to be taken. The scion must be firm and well ripened, otherwise the buds are apt to perish. If the bark does not rise freely on the stock, the operation should be deferred for a few days, or until the sap is induced to flow, which may be hastened by giving a few copious waterings. The buds should be taken from ripe shoots of the current year; the fact of the plant being in bloom will generally indicate that the wood is ripe and thoroughly matured. In taking off the leaves, let a portion of the leaf-stalk be left at the base of the eye, it will be an assistance when inserting the bud, and will help to shade and protect the bud after it is inserted. As soon as possible after the incision is made in the stock, the bud (which must be previously cut and the wood taken out) should be inserted, and immediately bound up with cotton or matting, so as to exclude the air and wet until the bark is united. In about three weeks the matting or cotton will require to be loosened, and in a few weeks

afterwards may be taken entirely off. A few inches should be taken off the end of the briar which has been budded; the sap will consequently flow more directly to the bud at the base of the shoot.

Grafting. Early in spring is the usual time for grafting roses; but with the assistance of propagating pits or houses where artificial heat can be obtained, this operation can be performed at various seasons of the year, provided the stock and the scion are both in proper condition. The stock to be grafted should be rather in advance of the scion, and taken when the sap is in active motion. The scion should consist of hard, well ripened wood, and not too far advanced. Any of the modes of grafting usually practised, such as whip-grafting, saddle-grafting, or cleft-grafting, may be adopted. Whip or tongue-grafting is the most simple and the most expeditious, and will answer every purpose.

The Manetti is the best of all stocks in use for grafting. Young stocks may be taken up in November or December, potted, and placed in a frame where a gentle bottom heat is obtained; in a few weeks they will be ready for grafting. After they are grafted let them be plunged in the same bottom heat as before, and here they should be kept rather close, and shaded when necessary, until the grafts have fairly taken and the plants have commenced growing; they may then receive a little air, or be removed to a cooler house or frame. Avoid too high a temperature; the rose, being very impatient of heat, should always be forced steadily. A temperature of 65° to 75° by day, and 55° or 65° by

night should not be exceeded. When watering do not wet the graft, nor allow too much moisture to settle near to the junction of the graft; to prevent this, a little clay or wax may be placed around the junction. With a little attention to these minor matters a good practitioner will be as successful with this mode of propagating as with the more simple and generally practised system of budding. I have not spoken of grafting roses out of doors, nor do I recommend the practice; the chances of success are so uncertain that it rarely answers to risk them, especially when we have a more safe and certain method in the one described above.

Layering. This mode of propagating may be applied to most of the free growing roses, but it is only practised with sorts which are required to be grown upon their own roots, and which do not strike freely from cuttings; for instance, the Old and other Moss, the Provence, and Austrian Roses, &c. To obtain proper shoots for layering, the plant should be cut down to the surface of the ground every year, young shoots will then be produced; these should be layered about June or July, or as soon as the shoots become sufficiently hardened to bend without breaking. An incision must be made at an eye upon the side of the shoot, and gently twisted so that the incision be kept open. The shoot should then be secured in its position by a peg, and covered with earth to the depth of three or four inches. In the following spring, most of these will have formed roots, and may then be taken off and planted out; those not rooted must remain down another season.

Cuttings. With the exception of the Moss, Austrian, and a few other varieties, nearly all may be struck from cuttings; and to obtain plants upon their own roots, this is the most expeditious and best system. This mode of propagating roses may be practised throughout spring, summer, and autumn, but the shoot which is to form the cutting should in all instances be matured and well ripened. The cuttings should be made from three to four inches in length, and if a small portion of the old wood can be taken off with it, so as to form a heel, the cutting will strike more freely. The two or three upper leaves should be allowed to remain on the cutting until they fall off, when they should be removed to prevent their damping.

Take five or six-inch pots and fill with a compost of friable loam, leaf mould, and sand, pressing it moderately firm; plant with a small pin from six to eight cuttings evenly round the sides of the pot, making the soil firm around them, then water with a fine rose to settle the soil. Place the pots at once into a frame with a gentle bottom-heat, where they can be kept close and constantly shaded from the sun. Sprinkle them over with a fine rose, or syringe daily for the first week or nine days. In about three or four weeks the cuttings will have rooted, when they should be potted singly into three-inch pots, and again placed in a frame with a gentle bottom-heat; here they should remain for nine days or a fortnight, being shaded and watered as required. When rooted round their pots, they should be removed into a cold frame to harden previous to being placed out of doors.

Many hardy kinds, such as the Hybrid Perpetuals, Bourbons, &c., may be struck out of doors, under hand-glasses. About the end of September or beginning of October, prepare a border, with light soil, upon the north side of a hedge or wall; let the cuttings be made five or six inches in length, choosing firm well-ripened wood, taken off with a small portion of old wood to form a heel; without this the cuttings will not strike so readily. Put the cuttings in thickly, pressing them firm into the soil; well water, and place over them small hand or cap glasses; these must remain on until the cuttings are struck in the spring. An occasional watering with clear lime water should be given, this will destroy the worms, which are often troublesome and disturb the cuttings. In the spring, when the cuttings are found to be rooted, take them up and pot singly into small pots, put them into a cold frame where they can be shaded from the sun, until sufficiently hardened to be planted out of doors. Some of the hardy, vigorous-growing summer roses will strike if planted in a shady border, without the assistance of hand glasses; but when this is done, the cuttings require to be made nine to twelve inches in length, and planted at least six to eight inches deep, and the soil trodden firmly to them.

Suckers. This mode of propagating is practised but seldom, and then only with a few kinds, such as the Scotch and Austrian roses. The former emit suckers freely, which are taken off and planted out during the spring or autumn; these suckers have generally some small fibrous roots attached.

By Seed. The object in raising roses from seed is to obtain new varieties. Although somewhat uncertain as to the result, it is, nevertheless, a very pleasant and interesting occupation. There has long been an idea prevalent that good varieties of roses cannot be raised from seed in England, and that we must go to warmer climates for anything of sterling merit. This, however, is not entirely so, as some excellent varieties recently raised in this country will testify. The tender varieties, however, seldom if ever mature seed in our climate, but even the ripening of seed can be accomplished artificially; and, with the assistance of glass and hot water, we may reckon our advantages equal to those in the south of France or Italy. The seed pods should become thoroughly ripe upon the tree before they are gathered. When taken off, place each sort separately into small pots, mixing with them fine sand. They may be stored away in this manner until February, care being taken to keep them out of the way of mice, which will very soon destroy the lot, if the opportunity is given them.

Early in February take them out and break up the pods, and rub the whole until the seeds are all separated; they may then be sown in shallow pans, pots, or boxes, using light soil with a liberal admixture of sand, and cover with the same to the depth of an inch. Place them in a frame having a northern aspect, or otherwise in a shady or sheltered spot, where a uniform temperature and moisture can be maintained. About April or May, many of the seedlings will begin to make their appearance, but

this will depend upon the quality of the seed ; if it was well ripened when gathered, a large portion will vegetate the first season, but in most instances the greater portion will not vegetate until the following spring.

The seedling plants should be removed when sufficiently strong to bear transplanting: in taking them up, care should be taken not to disturb the dormant seeds, or others just beginning to vegetate. The seedlings which are removed from the seed pans during the spring and summer should be pricked out into other pans, and afterwards placed in a cold frame, where they can be shaded from hot sun, and occasionally watered. If allowed to grow in the seed pans until autumn, they may then be transplanted into the open ground in a well sheltered border, and there allowed to remain until they bloom. Many of the seedlings will bloom the first year, but little more than the colour can be ascertained until the plant has been established at least two years. Those which produce very thin petals, or which are deficient in colour, or single, may safely be discarded at once; retaining only such as have good outline, decided and distinct colour, petals of good substance, and the flower, if not full, somewhat more than semi-double. If all or any of these properties exist, they will improve under cultivation.

CROSSING OR HYBRIDIZING. By crossing varieties of opposite characters, the colour, habit, and form are changed, and new varieties are obtained ; thus we are constantly receiving flowers of increased size and more

perfect form. To perform this operation with any chance of success, a judicious selection of the varieties to be crossed must be made. Choose for the parent plants such sorts as bear seed freely ; upon a fine dry day, when the bloom is fully expanded, remove the anthers from the flower with a pair of scissors, to prevent self-impregnation ; then take the pollen of another variety of opposite character, or one possessing some property that it is desirable to impart, and place on the pistil of the parent plant. This will require to be done with great care, and at a time of the day when the farina is observed to be most abundant. After the flower is impregnated, enclose it with a gauze bag, to prevent insects from disturbing the pollen until it has taken effect. The seed-pod which has been fertilized should be marked so as to be known at the time of gathering, and should be noted down so that the realization of the object aimed at may be watched in the seedling plants. Much time and patience will be required during and after the performance of this work. To those who have time to devote to it, nothing can be more pleasing or interesting, and it is the only sure means of bringing out any desired properties in new varieties.

A more easy plan, though not so certain in its results, is to plant side by side varieties of opposite characters, and to allow fertilization to be effected by the action of the wind, insects, or other causes. There need be no restriction as to crossing one group with another ; and so distinct and opposite are the properties of many varieties, even in the same group or family, that no limit can be placed to the possible results.

Before fertilizing, it will be necessary to become acquainted with what kinds will bear seed freely, and these must be selected for the seed-bearers. A great many varieties of roses never produce mature seed. The following may be taken as good seed-bearers.—*Moss*: Alice Leroy, Baronne de Wassenæer, Celina, Clemence Beaugrand, Comtesse de Murinais, Luxembourg, Marie de Blois. *French*: Bizarre Marbrée, Boula de Nanteuil, Glory of France, Napoleon, Perle des Panachées. *Hybrid China*: Blairii No. 2, Brennus, Chénérolé, Fulgens, Général Allard, Magna Rosea. *Hybrid Bourbon*: Charles Lawson, Coupe d'Hébé, Paul Ricaut, Paul Perras. *Austrian*: Harrisonii. *Ayrshire*: Ruga, Bennett's Seedling. *Damask Perpetual*: Du Roi. *Moss*: Perpetual White. *Hybrid Perpetual*: Annie Wood, Baronne Prévost, Black Prince, Centifolia Rosea, Charles Lefebvre, Dr. Andry, Duchess of Sutherland, Duc de Cazes, Duc de Rohan, François Lacharme, Géant des Batailles, Général Jacqueminot, Gloire de Santenay, John Hopper, Jules Margottin, King's Acre, La Reine, Le Rhone, Lord Clyde, Lord Raglan, Madame Charles Crapelet, Madame Hector Jacquin, Pierre Notting, Peter Lawson, Prince Leon, Sénateur Vaisse, Souvenir de Leveson Gower, Thorin, William Jesse. *Bourbon*: Bouquet de Flore, Louis Odier, Pierre de St. Cyr, Sir Joseph Paxton. *China*: Mrs. Bosanquet, Fabvier, Old White. Many of the Tea-scented roses bear seed freely, but unless in very favourable situations and in warm seasons, the seed rarely ripens. To rear seedlings of this class, as well as some of the Noisette and China groups, the

plants require to be brought under glass to mature their seed.

FORCING. Few plants are more impatient of a high artificial temperature than the Rose; and as little assistance can be expected from nature throughout the cold sunless months of December, January, and February—(the time when forcing is most active), a considerable amount of care and attention as well as skill, must be exercised. Houses or pits of proper construction, with efficient heating appliances must be provided. The best are low span-roof houses, or pits, with platforms or raised beds on each side, and the path along the centre. This will allow of the plants being placed within ten or twelve inches from the glass, so that they may receive the full benefit of all light and sun. The platform or raised beds should be constructed so that the pots can be plunged in leaves or tan, and so arranged that the plants can be plunged more deeply as they increase in height, always endeavouring to keep them about ten or twelve inches from the glass. Air should be admitted throughout the bottom and top of the house, but not so as to come in direct contact with the plants. If hot water pipes are used, not less than a double row of four-inch pipe for a house twelve feet in width will be sufficient. The temperature by day should not rise higher than 60° or 75°, nor fall lower than 40° to 50° by night. The plants intended for forcing must be established at least one year in pots, varying from seven to twelve inches in diameter, according to the size and

strength of the plants, which may be either worked upon the Manetti, Dog Rose, or upon their own roots. I prefer plants worked upon the Manetti for all kinds, excepting the Noisettes, and these I should choose plants grown upon their own roots, or worked upon the Céline stock.

To prepare all the hardy kinds, let the plants be taken up in the autumn. Carefully trim the roots, and pot into eight or nine-inch pots, using good turfy loam, and a liberal admixture of rotten dung and leaf mould. After potting, let them be watered and placed upon a sheltered border, where they can be plunged in coal-ashes, leaves, or tan. In the spring cut them back rather close, and, as they commence growing, disbud and tie the shoots out, so as to form well-shaped plants. Any flower buds which appear should be taken off before they become fully matured.

The Tea-scented and other tender sorts should be potted into seven or eight-inch pots, about March or April, and either grown under glass, being plunged in a gentle bottom heat, or otherwise grown out of doors upon a hotbed, where a genial bottom heat can be obtained throughout the summer. Early in October the plants should be repotted, taking pots according to the size of the plants, say from eight to nine inches in diameter; a portion of the old soil should be removed, but this should be done without injuring or disturbing the roots. After potting, place them in a sheltered situation until about the end of November; they may then be pruned, and if they have been properly disbudded, and the shoots have been trained

during the previous growth, little more than shorten. ing the shoots down to three or four eyes will be necessary. The Tea-scented sorts will not require to be cut so hard, in fact they should receive only moderate pruning. The plants may now be taken into the forcing house, the pots being plunged to their full depth in prepared beds of leaves or tan ; here they should remain for the first fortnight without any artificial heat being applied, after which begin gently, increasing the temperature gradually as the plants are commencing to grow. The plants being brought up rather close to the glass, to receive all the benefit to be derived from sun and light, will be somewhat exposed to sudden changes of temperature ; to provide against this, protection must be given by covering the outside of the house with mats or canvas during frosty weather. When the plants commence growing, examine them frequently for the grub, and upon the first appéarance of greenfly, fumigate with tobacco ; and this will possibly require to be repeated every nine days or fortnight. Water the paths occasionally to keep up a moist atmosphere, and in the morning during fine weather let the plants be syringed over, and air admitted on all favourable occasions. If the least sign of mildew is observed, let sulphur be applied immediately, for should this disease once get thoroughly established, there will be some difficulty in eradicating it. The syringing must be discontinued when the plants are about to bloom.

If it is desired to remove any plants to flower in the greenhouse or conservatory, let this be done a

week or nine days before the blooms are likely to expand, when they will have somewhat recovered the change of temperature by the time they come into bloom, and will last much longer in flower in consequence. If allowed to bloom in the forcing house, shading must be provided and applied when necessary; air must also be admitted more abundantly, and less fire heat used. Plants which were brought into the forcing house in December, will bloom about the middle of March. To keep up a succession, introduce another supply in January and again in February, they may then be had in bloom from March till June.

After the plants are gone out of bloom, harden them off for a few weeks in a cool house or pit, before turning them out of doors. When ready to be taken out, top dress with rich soil, and plunge all the hardy kinds in an open airy situation, there to remain until required for the next season's work. About September or October let them be repotted, take off a portion of the old soil, trim the roots, and pot into rich compost as before recommended. The same plants may be forced annually for several years, provided they are carefully attended to, and not allowed to be forced or bloom more than once during the same season.

The French accomplish much in the way of forced roses, and their mode of growing them in small sized pots for market is very clever. The plants which they use for this purpose are all budded upon the Dog Rose, of all heights from dwarfs to standards, and the pots in which they are grown are rarely

more than seven or eight inches in diameter, and many are grown in five or six-inch pots. The plants have a very unique appearance, and are usually loaded with deliciously fragrant flowers. With few exceptions, the gardens or nurseries where these are grown are small and untidy, and the glass houses of the rudest description, having the most poverty-stricken appearance; nevertheless, the healthy growth of the plants therein show that they have been well tended, and that the growers know full well how to manage them.

One of the largest establishments for forced roses I have ever seen, and which I believe is the largest in France, is that of M. Laurent, 88, Rue de Lourcine, near Paris. He has some three or four acres entirely covered with low span-roof and lean-to houses and pits, specially for forcing roses and lilacs, these being the only two plants he cultivates. I am quite afraid to say the number of roses which are here forced annually, but I should judge there could not have been much less than fifty or sixty thousand. It was early in February when I saw them, when the houses and pits were all full, and many thousand plants outside ready to take the place of the early forced roses, as soon as their blooms were over. The blooms are gathered every morning, and sent to Paris for bouquets and decoration, for which there is always a large demand. The plants from this establishment are not sold. M. Laurent is also celebrated for forcing lilacs. His method of producing white flowers from the Purple Lilac is not generally known or practised, nor am I thoroughly in the secret, but it is never-

theless a fact that he depends entirely upon the Purple Lilac to produce the finest white blooms throughout the winter.

GROWING ROSES IN POTS FOR THE GREENHOUSE OR FOR EXHIBITION. The treatment necessary for preparing roses for greenhouse culture, as well as for exhibition, will be somewhat the same in both instances, though perhaps more care and attention will be required for the latter, both in training as well as after treatment. Commence with young healthy plants worked upon the Manetti stock. Plants established in eight or nine-inch pots, of the most suitable kinds for pot culture, are generally to be had at the nurseries, and these being specially prepared for the purpose a season will be gained by commencing with them. Early in the autumn the plants may be potted into seven, eight, or nine-inch pots, the strongest sized plants will require the latter size. The compost should consist of strong turfy loam and an equal quantity of rotted cow-dung or horse-dung. The Tea-scented and China sorts will require the addition of leaf-mould and a small quantity of sand. The pots must be thoroughly well drained, using two or three inches of potsherds; upon these place a few inches of charcoal and bones, and again a few lumps of the turf from the compost, which, by-the-bye, should not be sifted or broken too fine. If the plants are in small pots, loosen the ball of earth gently without disturbing the roots; in potting, press the soil firmly round the plant, and afterwards give a gentle watering, but not too

copious at first, as the soil is apt to set hard on the surface by so doing. The hardy sorts can be plunged out of doors in an open situation, using tan or coal-ashes as a plunging material. The Tea-scented and other tender kinds must be placed in a frame, where they will be better plunged in tan; and if this is in sufficient quantity to create a genial warmth, it will greatly assist them, and the roots will soon commence to grow. Towards spring, the hardy worked plants which are plunged out of doors will require to be pruned down rather closely the first year, and this can be done a few weeks after potting. About the middle of May, prepare a gentle hotbed, in an open sunny situation, with manure which has been turned several times previously, in which case the heat will be retained for a much longer period; upon this, place all the Tea-scented or other roses which it is desired to grow on as rapidly as possible; let them be plunged to the rim of the pot in sawdust or tan. Here with a gentle bottom heat and free access of air upon all sides, they will make rapid and robust growth. Let all buds be taken off as they appear. Give a supply of manure water once a week. In the course of three or four weeks the heat of the hotbed will be partially exhausted, it should then be turned over, adding some fresh manure to renew the heat; the plants are then to be replaced and plunged as before. About the end of October, remove them into the greenhouse or frame. The hardy sorts can be plunged out of doors and protected during severe weather. Early in February the plants will require re-potting, those

which have been growing in seven or eight-inch should be shifted into nine-inch, and those from nine-inch into ten-inch pots.

As soon as the potting is finished, let the plants be pruned. The Tea-scented and China must not be cut in too close. Select the best shoot near the centre to train for the leading stem, shorten it about one third, prune the other shoots one half or three parts their length, these should then be carefully tied out; this is most easily done by placing wire round the pot, underneath the rim. Let the shoots be drawn as near to the edges of the pot as can safely be done without breaking them, then make fast with small pieces of bast matting to the wire. If it is desired to grow the plants for exhibition, they must be carefully watched, and the shoots tied out as they advance in growth. The best form is that of a pyramid. To keep the plants equally balanced on all sides, a little skilful training will be requisite. Any gross shoots which appear should be stopped, the weak ones consequently will be encouraged. The second year the plants will be better if grown in a low house where they can be placed near to the glass and receive an abundance of air at all favourable seasons. To obtain plants of large size suitable for exhibition, three years at least must elapse before they can be brought into proper form and size.

ROSE CONSERVATORIES. Nothing can possibly be more delightful or beautiful than a large conservatory, filled entirely with the choicest kinds of Tea scented, Noisette, and China Roses. No artificial

heat being required, the temperature is delightful and most enjoyable at all seasons, but perhaps, more so in the spring of the year, when cold, piercing, easterly winds prevail. We have here the temperature of Italy or the south of France; no frost during winter to harm our roses, nor yet smoke or dust to stifle them; the whole being under easy control, can be tended at our pleasure. The green-fly, the greatest pest to roses out of doors, is here easily destroyed; a few pounds of tobacco paper will bring a whole colony to grief in a very short time. These are only a few of the advantages derived from growing the delicate kinds of roses under glass, and it is almost needless to attempt to picture to the rose amateur the delightful and pleasurable occupation which a rose conservatory affords at all seasons of the year, for it can more easily be imagined than described.

I had long contemplated the idea, as well as the necessity, of having conservatories in which to plant out all tender kinds of roses, but not until the destruction occasioned by the severe winter of 1860-61, was I fully determined to carry out this object. During that season nearly every Tea-scented, China, and Noisette rose not under glass was totally killed, this disaster being attributable as much, perhaps, to the cold, wet, sunless summer preceding, as to the severity of the winter. I then determined to erect a large conservatory, wherein to plant out all Tea-scented, China, and Noisette roses. This conservatory is 140 feet in length, 24 feet in width, and has a well prepared bed, 11 feet wide, made the entire

length of the house, with $3\frac{1}{2}$ feet walks passing round, upon either side of which are tan pits 3 feet wide, for growing specimen plants in pots. The centre bed is divided into seven rows, the centre row being planted with *Cloth of Gold*, *Solfaterre*, *Lamarque*, *Maréchal Niel*, *Gloire de Dijon*, *Climbing Devoniensis*, *Madame Falcot*, *Céline Forestier*, *America*, &c., &c.; these are intended to be trained upon iron-wire pillars to the top of the house, which, by-the-bye, is 16 feet in height. The other rows are planted with standard and dwarf-standard Tea-scented Roses, from 4 feet graduating to 1 foot; the whole is surrounded by a neat garden-tile edging, underneath which is planted a border of the Fairy Rose.

PROPERTIES OF A GOOD ROSE. The first and most essential point to constitute a good rose, is that the variety be hardy, and of a healthy and moderately robust habit, combining ample foliage; for be its blooms ever so good, if it refuses to grow under proper treatment it is almost worthless. Next to these are fine form, fullness, large size, good substance, fragrance, freedom to bloom, and decided and distinct colour. The form of the flower, whether it be cupped, globular, or expanded, should be symmetrical; the petals even and regularly placed, smooth and free from all indentures, full but not crowded, the outer row being broad and closely folded to enable the flower to stand firm for several days; they should be thick and leathery in texture, and not (as we too frequently see them) thin and flimsy, and either faded or fallen to pieces after an

hour's sun. The colour, whatever it be, should be decided and lasting, and not changing to a dull, cloudy, or objectionable shade. The flower stem should be stout, to hold the bloom partly erect, so that it may be seen without the necessity of applying the hand. Every rose should be fragrant, and the more highly so the better. Whether summer-blooming only or perpetual, it should be free to flower, in the former case yielding abundance of blooms throughout June and July, and in the latter from June till November, allowing for an occasional rest between each period of flowering. A Perpetual Rose, to justify its name, should always produce blooms at the end of each shoot. As examples of finely formed and perfect roses, the following may be instanced: *Cupped*—Madame Vidot, Comtesse Cécile de Chabrillant. *Expanded*—Madame Charles Wood, Souvenir de la Malmaison. *Globular*—Reine du Midi, La Reine.

There is another class of roses which must not be overlooked, nearly if not quite as useful as the above, and to some much more so. These are hardy, free blooming, attractive varieties for garden decoration, many of which have not a single property to recommend them as show flowers, but which, for grouping and general effect in the flower garden, are most beautiful and attractive. The properties most to be desired in these are freedom and uniformity of growth, profusion of bloom, and brilliancy combined with durability of colour.

EXHIBITING AND CUTTING BLOOMS FOR SHOW. The method of showing now most generally adopted is in

trusses either singly or in groups of three trusses, in the latter case each truss is placed in a separate tube, so as to exhibit as far as possible the habit and characteristic properties of the variety; this is, undoubtedly, the best and most natural way of showing blooms.

The blooms are usually shown in boxes, painted green, which should all be of uniform size. The dimensions required by the Horticultural Society are 6 inches in height at back, 4 inches in front, and 18 inches in width, and any convenient length, say from 3 to 4 feet. The lids are made so that they can be taken off when the flowers are staged for exhibition. The boxes are filled with green moss, into which zinc tubes holding water are inserted for the reception of blooms. The tubes may be from 3 to $3\frac{1}{2}$ inches deep, and about $\frac{3}{4}$ inch wide. When 3 trusses of each variety are to be exhibited, the tubes are placed in a triangular form, each to hold one stem.

When cutting blooms, choose, if possible, the early part of the morning, before the dew is off. Blooms gathered at this time will continue fresh throughout the day, but if cut when the sun is upon them, many of the thin petaled varieties will fade in a few hours. When they cannot be gathered in the morning, let it be done late in the evening, putting the stems into water immediately. In gathering and selecting the blooms, some little practice and skill, as well as an acquaintance with the varieties, will be necessary to enable the exhibitor to form a correct judgment as to the precise

stage in which a flower should be when cut, so as to show the real character of the variety, and to be preserved perfect throughout the day of the show. If it be necessary to gather the flowers the morning before the day of the show, many of the thin petaled varieties must not be more than half expanded; the stiff and thick petaled kinds may be nearly fully so. In very hot weather it will not be safe to depend upon any blooms which have been fully expanded and exposed to the sun for even a few hours. In the autumn or in cool weather this is not so important. If the blooms can be gathered upon the morning of the show, many of the flowers may be fully, and others three parts expanded. From four to five inches of the stem should be cut with the bloom, and all or nearly all the foliage allowed to remain. In arranging the blooms, some taste will be necessary; the largest blooms should be placed in the back row, and the smallest brought to the front. The colours should contrast as much as possible, for on this the general effect of the stand will much depend. The blooms should always present a nice fresh appearance, and to keep them so a little water should be occasionally sprinkled upon the foliage; they require also to be kept in as cool and shady a place as possible until the time for staging.

LABELS. Every rose tree should be labelled; not only does a knowledge of its name add to the interest of the flower, but it is also a guide at pruning time, for a successful pruner will invariably look to the name of his rose before commencing operations. Knowing this, he will call to mind the

habit of the variety, and prune accordingly. The label most generally used is made of deal, cut about three inches in length, and three-quarters of an inch in breadth; these are pierced with an awl at one end, and a piece of copper wire passed through the hole, by which the label is attached to the stem of the plant. These labels must be painted with white paint, and, before it becomes dry, the name written with a dark pencil. A very pretty and neat zinc label for roses, as well as for other trees, is offered by Mr. Yeates, 6 Bulstrode Street, Welbeck Street, London. The name is written with indelible ink, and lead wire or tarred twine is used for suspending them.

PART II.

A CHOICE SELECTION OF THE MOST ESTEEMED VARIETIES OF ROSES IN CULTIVATION.

WITH SHORT DESCRIPTIONS AND NOTES ON THEIR ORIGIN.

IN this collection, I have endeavoured to enumerate and describe all the varieties of roses worthy of cultivation up to the present time; there may be some omissions of good roses gone by, on the other hand there are some enumerated which might possibly have been dispensed with, and will ere long be no more. The list may appear somewhat voluminous, and perhaps rather perplexing to those who wish only for a unique selection. To obviate this, I have marked with an asterisk throughout each class such varieties only as possess superior excellence, and which may be safely taken as the cream of the whole collection, other selections for particular purposes will be found further on. The new roses of quite recent introduction I have purposely omitted, simply through not having proved them sufficiently to be enabled to give a reliable opinion. It requires at least one season to accurately test the properties of a new rose; and those who jump at hasty conclusions upon the quality of this or that flower, are often misled, and by so doing mislead others. All I have described are from my own personal observation, and may be depended upon as being reliable.

SUMMER ROSES.

FLOWERING IN MAY, JUNE, AND JULY.

THE PROVENCE OR CABBAGE ROSE.

(*Rosa centifolia*).

The Old Provence or Cabbage Rose is supposed to have been introduced in 1596. All the varieties are perfectly hardy and deliciously fragrant, mostly of moderate or dwarf habit of growth, requiring rich soil and close pruning. They thrive best when grown upon their own roots, and a bed of the Old Cabbage Rose should be in every rosarium. The De Meaux, or Pompon, is a most interesting and beautiful little rose; for a small bed, or for an edging to larger beds, nothing can be better or more beautiful. Few of the kinds are suitable for tall standards, they will, however, thrive well upon half standards and dwarf standards.

**Cabbage Provence or Old Cabbage Rose*: flowers rose colour, the outer petals changing to paler rose; form globular, very large and full, and highly fragrant; habit of growth moderate.

**De Meaux or Pompon*: flowers rosy-pink and lilac; very small and compact, habit quite dwarf; a most beautiful little rose.

Striped Unique: white occasionally striped with lake; a sport from the old *White Unique*, often beautiful.

Spong: pale rose, flowers small; a pretty free flowering rose, and useful for edging or for a small bed.

Unique or White Provence: flowers paper white, perhaps the purest white rose grown, form cupped, moderate size and full, though the petals are not very evenly disposed, habit moderate; a most beautiful rose.

THE MOSS ROSE.

(Rosa centifolia muscosa).

The original or Old Moss Rose is supposed to have been introduced from Holland in 1596, but as to its origin no satisfactory account has ever been given. It is however generally believed to be a sport from the Old Provence, and from the close resemblance which the flowers bear to each other (with the addition of the mossy buds of the former), this is doubtless correct. Although several hundred varieties of the Moss Rose have been raised since the introduction of the original, none are superior, if equal to it, in point of beauty or fragrance; its long handsome buds covered with tufts of the most beautiful mossy excrescence make it interesting and beautiful in all stages. The Crested Moss Rose, or, as it is sometimes called, Crested Provence, is most peculiar and beautiful; the beauty of its bud alone should claim a place for it in every garden. The Moss Roses are mostly of delicate growth, though some are vigorous and robust in habit, and form good standards, but as a rule they all succeed best when grown upon low stocks, or otherwise upon their own roots; the latter mode is best suited to the Old Moss, and no garden wherever roses are grown should be without a bed or two of this old favourite. They require rather high cultivation and close pruning, and generally speaking rather better treatment than ordinary kinds. In wet or cold damp soils they do not thrive, a warm dry soil being required, and this well supplied annually with

manure. If at any time they appear to decline in health, they should be taken up and replanted into fresh loamy soil, and cut hard back.

Alice Leroy: rosy-pink with handsome mossy buds, moderate size and full, free-flowering and good habit; a good and useful rose, forming a good standard.

**Baronne de Wassenaar*: deep rose, very large and double, buds moderately well mossed, habit vigorous, a very showy and useful rose; forms a good standard.

Celina: velvety purple and crimson, buds well mossed, and very beautiful; flowers moderate size, full, and when newly opened very beautiful; habit of growth rather too dwarf; requires rich soil and close pruning.

Clemence Beaugrand: soft pink, a handsome and well mossed bud, flower large, having a fine broad petal, not very full; a good rose, of free habit.

**Common*, or *Old Moss*: pale rose, globular, very large and full, and deliciously fragrant, buds well mossed, habit free; the most beautiful of all the Moss Roses; should be grown upon its own roots in rich soil.

Comtesse de Murinais: pale flesh when newly opened, changing to pure white, large and double though not very full, robust habit; one of the hardiest of the white Moss Roses.

**Cristata*, or *Crested Provence*: pale rosy-pink, changing to pale rose; globular, very large and full, the buds beautifully crested, an interesting and beautiful rose; habit moderate.

**Frederic Soulie*: crimson shaded with purple, large and full, a well formed and excellent rose; habit moderate.

Gloire des Mousseuses: pale rose, the outer petals whitish, one of the largest and best of Moss Roses, buds large and handsome; habit very vigorous, forming a good standard.

**Gracilis*, or *Prolific*: deep pink, buds handsomely mossed, flowers large, globular, full and of good shape, an excellent rose; habit moderate.

John Cranston: shaded violet-crimson, colour rich and good, flowers of moderate size, expanded, full, and well formed; habit free.

Julie de Mersant: rosy-pink, moderate size, blooming in clusters, buds small and very pretty.

**Lancet* : deep brilliant rose, a beautiful round handsome bud and well mossed, flowers very large, full, and excellent ; one of the best Moss Roses grown.

Luxembourg : purplish-crimson, flowers large and full, a very old variety, of most vigorous habit ; very useful as a pillar rose, or as a tall standard.

Marie de Blois : bright rose, large and full, an excellent rose, with well mossed handsome buds ; habit robust and good.

Princess Royal : pale flesh, very compact and full, flowers rather small, though quite distinct and very beautiful ; habit moderate.

Reine Blanche : pure white, flowers of good size and tolerably double.

Unique : pure white, in dry weather slightly tinted ; evidently a sport from the Old Unique Provence, which the flower much resembles, with the addition of having mossy buds ; habit dwarf and delicate.

**White Bath* : paper-white, very beautiful and distinct ; one of the best white Moss Roses in cultivation.

THE FRENCH ROSE.

(*Rosa Gallica*).

The French Rose, or *Rosa Gallica*, is supposed to have been introduced into England about the sixteenth century, and until the introduction of the perpetual blooming varieties was the favourite Rose of our English gardens. Upwards of one thousand varieties of this family alone have been cultivated ; such, however, has been the increase of Perpetual Roses during the last twenty years, that the *Gallica* and other summer blooming roses (excepting the very choicest kinds) have long been thrown out of cultivation. There are, however many varieties of this family which possess a brilliancy and richness of colour, together, with flowers of perfect form and

chaste outline combined with delicious fragrance, which for garden roses cannot well be dispensed with. They are all perfectly hardy, and will grow in any ordinary garden soil, though improved by; and well deserving of liberal cultivation. They are all suitable for growing as standards or dwarf bushes, and no roses bloom more abundantly, or produce a finer show throughout June and July: moderately close pruning is necessary, the heads being kept well thinned out of the small and weak wood.

**Bizarre Marbrée*: rose beautifully mottled, full and finely shaped; a good free-blooming rose.

**Boula de Nanteuil*: rich crimson and purple, very large and full; a well formed and excellent flower, and a first-rate show rose.

D'Aguiseau: brilliant crimson shaded and slightly mottled; perfectly formed, and a beautiful rose.

**Gloire de Colmar*: deep crimson shaded with velvety-crimson, full and finely formed; a beautiful rose.

**Kean or Shakespeare*: rich velvety-crimson, flowers large and full, and perfectly formed; one of the most perfect and constant show roses.

Latour d'Auvergne: bright rose slightly mottled; a very large, finely formed, and excellent show flower.

Napoleon: bright rose suffused with purple, flowers large and full; a most abundant bloomer, and a very handsome erect-growing rose.

**Œillet Parfait*: white distinctly striped with rosy-crimson, very distinct and beautiful; one of the best of the striped roses.

**Ohl*: velvety-crimson, colour very rich and beautiful, flowers large and finely shaped; a superb show rose.

Perle des Panachées: white beautifully striped with rose; very pretty and distinct.

THE HYBRID CHINA ROSE.

(Rosa indica hybrida).

The Hybrid China Roses are hybrids between the French and the Provence, crossed with the China and Noisette Roses. They are most robust growers, with ample foliage and showy flowers. Their vigorous growth and hardy constitution make them the most desirable of all for forming large handsome pillar roses; and certainly nothing can be more beautiful than *Blairii* No. 2, *Chénédolé*, *Fulgens*, *Leopold de Bauffremont*, *Madame Plantier*, *Magna rosea*, &c., &c., when grown six to eight feet in height trained to rough poles; in this form they are usually one mass of flower from bottom to top. They are also adapted for standards, especially where tall standards are required, and the most vigorous sorts may be trained to form umbrella-shaped heads. In pruning, do not shorten the strong shoots upon the vigorous growers too close: thin out the heads, and prune the strong shoots down to 18 inches or 2 feet, and the weak ones to 9 or 12 inches.

**Blairii* No. 2: rosy-blush, fine large petals, very handsome foliage, and a most beautiful rose, either as a pillar or weeping rose.

Brennus: deep carmine; a handsome old variety; forms a noble standard or pillar rose.

**Chénédolé*: brilliant glowing crimson, a superb rose; a very showy standard or pillar rose.

**Comtesse de Lacépède*: silvery-blush; a most abundant bloomer and a charming rose, either grown as a pillar or standard.

**Double Margined Hip*: creamy-white beautifully tinted with carmine, very pretty and distinct rose.

**Fulgens*: bright scarlet-crimson, colour exquisite, a fine old rose, and very beautiful as a tall standard or pillar.

**Leopold de Bauffremont* : fresh rosy-pink, shape perfect, very compact and most abundant bloomer, when grown as a pillar rose truly beautiful.

**Madame Plantier* : pure white, a very old rose ; an abundant blooming and fine pillar rose.

Magna Rosa : light blush tinted with pink, large petal and a handsome rose ; very showy as a pillar or weeping rose.

Miss Ingram : nearly white, centre delicate flesh, flowers large, globular, and beautifully formed ; habit vigorous. Introduced 1867.

THE HYBRID BOURBON ROSE.

These are hybrids between the Gallica and Provence and the Bourbon Roses ; the foliage, which is large, handsome, and shining, partakes much of the latter kind, the flowers resembling the Hybrid Chinas. They are nearly all of vigorous or robust growth, forming handsome standards, and some make good pillar roses. A few are good show roses ; in fact *Charles Lawson*, *Coupe d'Hébé*, and *Paul Ricaut*, are equal to any in cultivation.

Catherine Bonnard : cerise, flowers moderate size, full and well formed ; will make a good pillar rose. Introduced 1871.

**Charles Lawson* : bright pink, very large, full, and perfect, a noble rose, with large handsome foliage ; forms a magnificent tall standard or pillar rose.

**Coupe d'Hébé* : delicate rosy-flesh, large and double ; one of the most beautiful of summer roses ; forms a handsome standard or pillar.

Frederick II. : violet-purple and crimson, large, handsome and distinct ; a good rose of vigorous habit.

Juno : pale rose, globular, very large and full, a handsome robust growing rose ; suitable for tall standard or pillar.

Paul Perras : pale rose, very large and full, a most robust grower ; a good rose for a pillar or tall standard.

**Paul Ricaut* : brilliant carmine, often shaded with velvety-purple, flowers large and exquisitely formed, habit free, though not vigorous ; one of the most beautiful roses in cultivation, and a superb show rose.

THE ALBA, OR WHITE ROSE.

(*Rosa alba*).

The Alba Roses are distinguishable by their light glossy foliage, and white, blush, or delicate pink flowers. They are a very distinct group, of moderate growth, with flowers of moderate size. They are all abundant bloomers, and form good standards, half-standards, or dwarf bushes. They require rather close pruning.

Félicité Parmentier : blush with pink centre, a beautiful and distinct rose, very free blooming, and good habit.

Madame Legras : pure white, free blooming and good ; free growth.

[] *Sophie de Bavière* : deep rosy-pink, flowers of moderate size, distinct and beautiful ; free growth.

Sophie de Marsilly : pale blush, centre rose, very beautiful in the bud ; habit free.

THE DAMASK ROSE.

(*Rosa Damascena*).

The introduction of the Damask Rose dates as far back as 1573, when, as is supposed, it was introduced from Syria. The leaves are pubescent and of pale green colour, by which the group is readily distinguished. They are all deliciously fragrant ; this, and the interest attached to the early introduction of the species will always obtain admirers of the Damask Rose. They are mostly of moderate growth, and require rather close pruning and rich soil.

**La Ville de Bruxelles*: bright glossy rose, full and very handsome, a robust growing rose; makes a good pillar or standard.

Leda or *Painted Damask*: blush edged with pink, pretty and distinct, moderate growth.

**Madame Hardy*: pure white, large and full; an excellent old white rose, of moderate though good habit.

Madame Stolz: pale lemon, nicely formed, distinct and pretty.

**Madame Zoutman*: the palest flesh, often white, shape perfect, the most beautiful of all light roses; moderate growth.

Semiramis: salmon-rose, centre fawn; a beautiful and distinct rose of moderate growth.

THE AUSTRIAN BRIAR.

(*Rosa lutea*.)

The Austrian Briar was introduced from the south of Europe in 1596. The different varieties form a beautiful and distinct group, containing the deepest and purest yellow roses in cultivation—the *Persian Yellow* especially; this was introduced from Persia in 1838. *Harrisonii* is also a beautiful free-flowering rose. These roses, after the first or second year, require little or no pruning: let the heads be kept well thinned, and merely the ends taken off the long shoots. They are, perhaps, more impatient of a smoky atmosphere than any other roses, and to grow them successfully they must have pure air and a warm dry soil.

Austrian Yellow: flowers single, colour bright yellow; succeeds best grown upon its own roots.

Austrian Copper: flowers reddish copper, single, striking and beautiful; succeeds best upon its own roots.

**Harrisonii*: fine golden-yellow, semi-double, flowers of moderate size, a very free grower and a most abundant bloomer; forms a good weeping or pillar rose.

**Persian Yellow*: the deepest golden-yellow, flowers large and full, the finest of all double yellow roses, hardy and free growing.

THE DOUBLE YELLOW ROSE.

(Rosa sulphurea).

The *Old Double Yellow* or *Yellow Provence* is so shy a bloomer, and so very rarely (even in the most favourable situations) does it produce a full blown flower, that it may now be said to have nearly gone out of cultivation. The interest attached to its early introduction, which is supposed to have been about the sixteenth century, is still an inducement to many to retain it in their collections, and to some it is still an interesting object for experiment, for when it can be induced to bloom, no double yellow rose is equal to it. For my own part I have long given up the attempt.

Double Yellow or *Sulphurea*: flowers of the deepest golden-yellow, very large, double, and globular, leaves palish-yellow, wood covered with small spines, habit of growth moderate.

THE SWEET BRIAR.

(Rosa rubiginosa).

So delicious is the scent of the Sweet Briar that no rose garden, nor, in fact, any other garden of flowers, should be without a bush or two, or a hedge of this native plant. Many varieties have been raised producing double flowers, all of which are more or less fragrant, but none whose leaves possess the delicious perfume of the common kind. I consider but one variety worthy of cultivation for its flowers alone, which is the *Double Scarlet*.

**Double Scarlet*: bright rosy-crimson, flowers small, perfectly double, and deliciously fragrant, very pretty and free flowering; habit of growth moderate.

THE SCOTCH ROSE.

(Rosa spinosissima).

The Scotch Rose is a native of the north of England and Scotland. Many interesting and pretty varieties have been raised, but as none of them possess the properties of a florists' flower, they have been thought but little of; nevertheless, they are very pretty and sweet scented, and blooming so early in spring, before any other roses, are desirable and well worthy of cultivation. They form pretty hedges in the rosarium, and may also be planted with good effect upon sloping banks or in rough situations. They are so thoroughly hardy that they will grow in the poorest soil. The following are a few of the best varieties:—

Argo: blush.**Arthur's Seat*: pale blush.*Flora*: deep rose.*Loch Ness*: pale rose.*Pluto*: lilac rose.*Snowball*: white.**Townsend*: blush.**Yellow*: straw often only
creamy-white.

CLIMBING ROSES.

THE AYRSHIRE ROSE.

(Rosa arvensis).

The Ayrshire Rose, a native of Britain, is one of the hardiest and most vigorous of roses. From their rampant and quick growth, they are the most suitable for covering rough banks, archways, arbours, festoons, &c., they also form beautiful objects when grown as weeping roses, being budded upon tall standard briars, eight to nine feet in height. No

pruning (further than reducing their size when overgrown) is necessary.

**Bennett's Seedling*: pure white, blooms in immensely large clusters, double, beautiful grown either as a climbing or weeping rose.

Dundee Rambler: white tinged with pink, very vigorous.

Fortune's Yellow: copper-yellow, semi-double, pretty; not perfectly hardy.

**Myrrh-scented*: white tinged with pink, pretty and very fragrant.

**Ruga*: pale flesh, deliciously fragrant, double, free-blooming, and very beautiful.

Splendens: white tinged with pink, not very double; small and pretty.

THE MULTIFLORA ROSE.

(*Rosa multiflora*).

The Multiflora Rose was introduced from China in 1804. From the original type some twenty or thirty varieties have sprung; out of these we can select three excellent and distinct roses, being all that may be desired from this group.

**Alba*, or *Félicité perpétuelle*: pure white, blooms in large clusters, shining sub-evergreen foliage; a beautiful climbing rose.

**Laura Davoust*: pink and lilac blush, blooms in immensely large clusters; the most beautiful of all climbing roses.

Russelliana: rose, changing to lilac, flowers of medium size; a distinct and pretty rose.

THE EVERGREEN ROSE.

(*Rosa sempervirens*).

The Evergreen Roses, correctly speaking, are only Sub-evergreen; although during a mild winter they often retain their foliage the greater part of the season. They are well furnished with ample foliage, of dark green colour, and of most vigorous growth;

their flowers are small, produced in corymbs, and mostly fragrant. The *Rosa sempervirens* is a native of Italy.

Adelaide d'Orleans: rose, shaded, small and pretty.

**Banksiaeflora*: white, centre cream, small and double, beautiful shining foliage.

**Donna Maria*: pure white, small and double.

Jaundtre: fawn coloured rose.

Princess Louise: creamy-white.

**Ramant*: pure white, a most vigorous grower.

THE BOURSULT ROSE.

(*Rosa Alpina*.)

The Boursault Roses are a very distinct group, having very smooth reddish wood, quite free from thorns; they are vigorous growers, making good climbing or pillar roses. The original *Rosa Alpina*, a single red rose, is a native of the Alps, the name Boursault having been given to it by a French amateur of that name, who raised the first double variety, which is still in cultivation under the name of the Old or Red Boursault.

**Amadis*, or *Crimson*: brilliant purplish-crimson, changing to purplish-lilac, a very showy semi-double rose, and one of the best.

Blush Boursault: blush flowers, large and double; a beautiful climbing or weeping rose.

**Inermis*: rosy-pink, changing to pale rose, flowers large and double; a distinct and good kind.

Weeping Boursault: flowers blush, small and pretty, blooming most abundantly: habit quite pendulous; a distinct and pretty rose.

THE BANKSIAN ROSE.

(*Rosa Banksia*.)

The White Banksian was introduced from China in 1807, and named in honour of Lady Banks. The

Yellow Banksian Rose was introduced in 1827. They are rather tender sub-evergreen roses, very vigorous in growth, with small and beautiful shining leaves. Their time of flowering is May; owing to this, and a somewhat tender habit, they can only be grown successfully against a south wall. The time to prune them is just after they have flowered, say in June; all gross shoots should be taken out, retaining all the small twiggy branches, for it is upon the points of these that the flowers are produced. A warm dry soil suits them best.

Fortuniana: white, large, and very sweet; introduced from China by Mr. Fortune, 1850.

Jaune Serin: bright yellow, flowers large, very vigorous.

Jaune Vif: yellow; very pretty.

**White*: white, flowers small and very double, produced in large clusters, deliciously fragrant, having somewhat of the violet scent.

**Yellow*: bright yellow, small, double, and very pretty; flowers produced in clusters in great abundance.

Besides the above groups of Climbing Roses, there are the Hybrid Climbing, two varieties only of which may be considered worthy of culture, viz: *The Garland*, white and pale lilac; and *Madame d'Arblay*, a pure white rose of the most vigorous growth. *Sir John Sebright*, a hybrid Musk Rose, is also worthy of culture: flowers light crimson, small but showy. The Prairie Roses (*Rosa rubifolia*), of which there are some twenty varieties, are only of secondary merit; the *Queen of the Prairies* is perhaps the best, and the only one at all worthy of notice.

AUTUMNAL ROSES.

FLOWERING FROM JUNE TILL NOVEMBER.

THE PERPETUAL MOSS ROSE.

(*Rosa centifolia*.)

It is only within the last few years that any really fine Perpetual Moss Roses have been raised; we have, however, now a few first-rate varieties in this class, possessing the properties of the Moss Rose, with the desirable addition of blooming in the Autumn. Many of the varieties are somewhat difficult to propagate, and only the more vigorous growers do well upon the Dog Rose. I find, however, that all of them grow freely upon the Manetti stock, especially the dwarf growers. They require rich soil and close pruning.

Douil de Paul Fontaine: flowers very large and fine; colour purplish-red, shaded, opens freely; introduced 1873.

**Général Drouot*: purplish-crimson, the best dark variety; grows freely upon the Manetti stock, but will not succeed upon the Briar.

**James Veitch*: deep violet shaded with rosy-crimson, flowers large and double, free blooming, and the best perpetual moss.

**Madame Edouard Ory*: reddish-crimson, globular, very large, and full, habit free and good; one of the best and most constant in the autumn.

Madame Moreau: bright rose, veined and shaded with red, flowers large, full, and expanded, scent of the Old Moss, distinct and good; introduced 1872.

Mrs. William Paul: bright rose, large and full, finely formed and cupped; a good free blooming rose.

Perpetual White: white, buds handsome and well mossed, flowers good size and tolerably double, blooming in clusters.

THE DAMASK PERPETUAL ROSE.

The Damask Perpetual Roses have many claims for admiration, their rich perfume is delicious, and their compact habit of growth, with a profusion of bloom throughout the summer and autumn, renders them most desirable roses for bedding or grouping. *Crimson Superb* or *Mogador* is the best, a large bed of this should be grown by everyone; it succeeds admirably upon the Manetti stock, but it does not grow freely upon the Briar. All the moderate and dwarf growers in this class require close pruning, and to grow them successfully they must have rich soil annually replenished with manure.

**Bernard*: bright salmon-pink, flowers double, small and beautiful, quite a gem, habit dwarf.

Crimson (Rose du Roi): brilliant crimson, flowers large and full, deliciously fragrant, robust habit; a fine old variety.

**Crimson superb*, or *Mogador*: brilliant crimson, shaded with purple, flowers large, well formed and double; an excellent and beautiful rose, very fragrant, habit moderate.

THE PERPETUAL SCOTCH ROSE.

(*Rosa spinosissima*.)

**Stanwell Perpetual*: this is the only variety of this group worthy of culture, the flowers are rosy-blush, often tinted with pink, large and tolerably full; it is a free autumnal bloomer and deliciously fragrant; a beautiful and distinct rose.

MACARTNEY ROSE.

(*Rosa bracteata*.)

The old single Macartney Rose is a native of China, and was introduced in 1795. There are only two or three varieties worth growing. They

are all somewhat tender, requiring protection during winter; they succeed best when trained upon a wall.

Alba simplex: white, flowers large and showy, but single; should be trained against a south wall.

Berberifolia Hardii: bright yellow with chocolate centre; flowers single, somewhat resembling the *Cistus*; habit dwarf, tender, and but short lived.

**Marie Leonida*: white, centre blush, flowers large and double; a very distinct rose, and very pretty.

MUSK ROSE.

(*Rosa muscata*.)

One of the oldest family of roses, somewhat resembling the Noisette Roses in habit; but having a peculiar musk-like scent. They flower freely through the autumn, but should have a sheltered situation, and protection during winter.

Double White: creamy, flowers small.

**Princesses de Nassau*: cream, changing to pure white, flowers double and very highly scented.

THE HYBRID PERPETUAL ROSE.

These invaluable roses have been obtained by crossing the Hybrid China with the Bourbon, China, and Tea-scented roses, thereby producing a hardy race flowering throughout the summer and autumn.

The Rose has perhaps undergone greater improvement within the last ten or fifteen years than it ever previously attained, and this improvement may be attributed in a great measure to the introduction of the class now under consideration having opened a field for hybridizing and raising seedlings to almost an endless extent. A better foundation to work upon there could not possibly have been, for cer-

tainly they are the most desirable of all roses. In this section we have varieties suited to any soil, climate, or situation, and also adapted to a variety of purposes. Although vigorous and hardy, nevertheless some discretion must be exercised in selecting for cold damp situations; for many which in the south of England are beautiful, will scarcely open their flowers in the north.

Nearly all the Hybrid Perpetuals, excepting those described as of dwarf habit, make good standards, but it will be well, in every instance, when making selections, to bear in mind that the vigorous, free, and robust make the best standards, the moderate the best half or dwarf standards, and the dwarf growers should be grown as dwarf bushes or dwarf standards only. There are many fine varieties in this class which are admirably adapted for grouping in masses. The following are especially fine:—*Géant des Batailles*, *Général Jacqueminot*, *Jules Margottin*, *Senateur Vaisse*, &c. The vigorous growers make handsome pillar roses; for this purpose they are best budded upon the Manetti stock. So overwhelmed are we with roses of this class that the great difficulty now is to make a choice selection, which considering that they number over 500 varieties, may naturally be supposed to be not a very easy task. I beg, however, to submit the following, which I think will be found to contain all the best which have been introduced up to the present time:—

Abbé Bramet: rich velvety-crimson, intense deep colour, flowers large, full, and evenly formed; [a handsome and distinct rose, habit robust. Introduced in 1871.

**Abel Grand*: clear silvery-pink, flowers large, full, and well formed, habit robust; a large and handsome rose, and very distinct; habit vigorous.

Achille Gonod: clear bright rose with a soft lilac shade; flowers large and of good substance; habit vigorous; a good rose.

**Adolphe Brongniart*: brilliant violet-rose, flowers very large, full and globular; an exquisitely formed flower with high centre; very fragrant; habit vigorous. Raised by Monsieur Margottin; introduced in 1868.

**Adrien de Montebello*: fine clear rose with soft violet shade, flowers large, full, and cupped, petals broad, smooth, and well disposed, a first-rate rose; habit vigorous. Raised by Margottin; introduced in 1868.

Alexandrine Bachmeteff: deep brilliant rose, very large, full, and well shaped; habit very vigorous; a fine autumn rose, and forms an excellent pillar upon the Manetti stock.

Alphonse Damaizin: brilliant shaded crimson, colour very rich, velvety, and superb, flowers compact and well formed, an abundant bloomer, and superb rose; habit moderate; introduced in 1861.

**Alfred Colomb*: brilliant carmine-crimson, flowers very large and full, fine globular form, habit vigorous; one of the finest roses grown, either as a show rose, or for bedding; raised by Lacharme.

**Alfred de Rougemont*: violet-rose and velvety-purple, a compact, round, and well formed flower of moderate size; introduced in 1862.

**Alice Dureau*: rosy-lilac, centre deep rose, flowers very full and globular, habit free.

Adelaide de Rotatier: silvery-pink, flowers large, full, and well formed, having large smooth outer petals; habit robust.

**Andre Dunand*: clear fresh pink, circumference of petals silvery-white; flowers very large, full, and finely formed. A superb rose, introduced in 1871.

Andre Leroy d'Angers: violet-crimson deeply shaded with rich plum colour, flowers of moderate size, cupped and well formed, large and smooth. Introduced in 1868.

Anna Alexieff: fresh rosy-pink, superb colour, flowers very large, well formed, habit vigorous; a fine and most abundant blooming rose.

Anna de Diebach: brilliant glossy pink, colour exquisite and lasting, flowers unusually large, full, and cupped; petals broad and smooth; a fine rose of moderate habit.

**Annie Laxton*: deep rose shaded with cherry-crimson; flowers medium size, very double, and beautifully formed; habit free. A good rose, raised by Mr. Laxton, introduced by Messrs. Paul & Son, 1870.

**Annie Wood*: brilliant crimson-scarlet, flowers large and full, imbricated; a first-rate rose; habit free. Introduced in 1866.

Antoine Alleon: bright red, colour clear and beautiful, flowers large, full, and cupped; a good rose, in the way of *Antoine Ducher*, Introduced 1872.

Antoine Castel: flowers of medium size, very double, colour bright rose or light cerise shaded with a dark hue, and white stripes. Introduced 1873.

**Antoine Ducher*: rich dark crimson, flowers globular, large, full, and deep; a distinct and beautiful rose; habit moderate. Introduced in 1866.

Antoine Verdier: very rich crimson-rose, flowers very large and full, petals large, smooth, and even; a good rose. Introduced in 1871.

Auguste Mie: glossy pink, a large globular flower, very full and well formed, a very vigorous grower, forms a good pillar; it does not open freely in cold damp situations.

Auguste Neumann: rich velvety-crimson and violet-purple, very dark; flowers full, of moderate size; a good rose, habit moderate. Introduced in 1869.

Auguste Rigotard: clear brilliant crimson, petals large, even, and smooth, flowers cupped, a fine rose, habit free. Introduced in 1871.

Baron Adolphe de Rothschild: crimson, fine large, smooth, well disposed petals, flowers large and full, habit free. Introduced in 1862.

Baron Chaurand: velvety-scarlet shaded with blackish-purple, large, full, and very finely cupped; a superb dark rose, habit vigorous.

**Baron Haussman*: clear carmine-crimson, flowers of good size, beautiful and full; habit vigorous.

**Baronne de Bonstettin*: rich velvety-purple, very dark, liable to burn in hot weather; a superb rose when newly opened; habit robust. Introduced 1871.

Baronne de Prailly: bright shaded red, very large and well formed, flowers full and globular; a good rose. Introduced in 1871.

**Baronne Prévost*: brilliant rose, very large and full, fine handsome foliage and vigorous growth; one of the best roses, and forms a fine pillar on the Manetti.

**Baronne de Maynard*: paper-white, flowers of moderate size and well formed; a very beautiful flower, but not large; habit moderately free.

**Baronne Pelletan de Kinkelin*: rich purplish-crimson, petals smooth, and flowers well formed; a good and distinct rose, habit vigorous.

**Baronne Louise Uzkull*: bright glossy rose, flowers very large, full and globular, the shape and form of *Madame Furtado*, possessing also the delicious scent of that variety, habit moderate; a beautiful rose. Introduced in 1871.

Baronne Vittat: flesh coloured rose, vigorous, very large and very full, globular. Introduced 1873.

**Beauty of Waltham*: cherry-crimson, petals large and well disposed, flowers cupped, large and finely formed, habit free.

Bernard Palissy: bright rose, flowers large, full, and expanded; a good rose, habit robust.

Berthe Baron: pale satin-rose, colour soft and beautiful, flowers very large, full, cupped and beautifully formed; a superb and distinct rose; raised from *Jules Margottin*. Introduced in 1868.

**Bessie Johnson*: blush-white, flowers very large and full, highly fragrant. A new English light rose, raised by Mr. Curtis, Torquay, and introduced in 1872.

**Black Prince*: glowing crimson shaded with purple, flowers large, full and globular, fine imbricated form; a distinct and first-rate rose, habit robust.

**Boule de Neige*: pure white, centre delicately shaded with cream, flowers medium size, beautifully imbricated and very perfect; habit vigorous; raised by Lacharme. Introduced in 1867.

Camille Bernardin: light crimson, shaded, flowers very large and full; a well formed good rose, habit vigorous.

Candide: clear flesh passing to white, smooth petals, and finely formed flowers; a distinct and good rose. Introduced in 1870.

**Captain Christy*: blush, centre delicate flesh, colour of the old *Maiden's Blush*; flowers erect, large, full, and beautifully formed. A superb rose, introduced 1873.

**Captain Lamure*: deep red passing to violet, flowers very deep, full, and perfect in shape; a very fine rose, habit moderate. Introduced in 1870.

Cœur de Lion: bright even rose colour, large, full, and of exquisite form, vigorous habit. Introduced by Mr. William Paul.

**Caroline de Sansal*: pale flesh, very large, full, and of fine form; a robust growing and most excellent rose, though in cold damp situations it does not open freely; makes a good pillar upon the Manetti.

**Centifolia Rosea*: rich rosy-pink, flowers large and cupped; petals smooth and even; a very distinct and beautiful rose, with abundant foliage, habit vigorous; a first-rate rose.

**Charles Fontaine*: rich velvety crimson shaded with plum, flowers large, full, and well formed, in shape resembling *François Laoharme*; a good rose, and highly scented; habit free. Introduced in 1868.

Charles Lee: bright vermillion, flowers compact, full, and well formed; size moderate, and possibly a good new rose. Introduced in 1868.

**Charles Lefebvre*: velvety scarlet, smooth and thick petals, flowers evenly and beautifully formed, a very fragrant and most superb rose, habit moderate. Introduced in 1861.

**Charles Margottin*: rich deep crimson, outer petals shaded with violet-purple, full expanded form; a very large handsome flower, habit vigorous.

**Charles Rouillard*: pale rosy-peach changing to pale lavender-rose, flowers cupped, large, full, and exquisitely formed, habit vigorous.

Charles Turner: deep rosy-crimson, fine colour; flowers large, full and cupped; a good rose, with the Damask Rose scent.

Charles Verdier: light rose, flowers large, full, and globular; a good well formed flower, but in bad weather does not open freely, habit free.

Charles Wood: brilliant deep crimson changing to rich purple, flowers of moderate size, habit free.

Christian Puttner: deep rose shaded with violet-purple, moderate size; a distinct rose, habit free.

Clement Marot: rose or pinkish-lilac, colour distinct, flowers exquisitely formed; habit moderate.

**Claude Million*: rich velvety crimson, beautifully shaded with violet, petals smooth and even, flowers large, cupped and well formed, habit vigorous.

Clemence Raoux: blush, edged and spotted with rose, flowers large, expanded. Introduced in 1868.

Climbing Jules Margottin (*Cranston's*): a sport from *Jules Margottin*; flowers exactly similar to its parent, a free and vigorous habit; not in a robust form, but branching as freely as an evergreen climbing rose; a great acquisition as a free growing perpetual climbing rose. Introduced in 1874.

Climbing Victor Verdier: bright cerise, colour very bright and attractive, a sport from *Victor Verdier*, with a vigorous climbing habit of growth; a fine pillar rose. Introduced by Messrs. Paul & Son, in 1870.

**Clotilde Rolland*: pinkish-rose, colour clear and good, flowers of moderate size, well filled, and nicely imbricated; fine globular form, habit moderate.

**Clovis*: dark crimson and red shaded, flowers moderate size, full and well formed; a distinct and fine rose. Introduced in 1867.

**Colonel de Rougemont*: deep glossy rose, a fine noble flower, at times much like *Baronne Prévost*, though a more beautiful rose; habit moderate.

Comte Bobinsky: brilliant scarlet-crimson, a most attractive colour, though the flowers are not well formed.

**Comte Litta*: brilliant velvety crimson slightly marbled; flowers large, full, and perfectly formed; a beautiful rose, habit free.

**Comte de Nantouil*: pale flesh, a most beautifully formed, cup-shaped rose, distinct, and of good free habit of growth.

**Comtesse Cecile de Chabillant*: beautiful satin rose, flowers large, full, compact and exquisitely formed; a superb rose of vigorous habit.

**Comtesse de Jaucourt*: flesh coloured rose, flowers very large and full, expanded form, beautiful and distinct, habit robust.

Coquette des Alpes: white, centre shaded with carmine, clustering, size moderate, habit free.

Coquette des Blanches: pure white. This will doubtless prove a good white rose, though the flowers are not sufficiently large. Introduced in 1871.

**Countess of Oxford*: carmine with soft violet shade, flowers large, full, and cupped; petals smooth and well formed; a very fine rose, habit vigorous.

**Crimson Bedder* (*Cranston's*): as a crimson bedding rose this variety surpasses every other rose for brilliancy of colour and continuous blooming; its habit of growth is moderate, and shoots short-jointed, producing a mass of flowers the whole season; colour scarlet and crimson, very effective and lasting, clean glossy foliage, and free from mildew. Introduced 1874.

**Devienne Lamy*: deep carmine, a large full flower of imbricated form; a very fine rose; raised by Leveque et fils. Introduced in 1868.

**Diana*: fine clear deep pink, of cupped form, large and very double, a good hardy rose with handsome foliage, blooming abundantly. Introduced by Mr. Wm. Paul, 1874.

**Docteur Andry*: rich rosy-crimson, flowers large and full, fine smooth petals; a superb rose, habit robust.

**Docteur Brechemier*: beautiful bright salmon-red, large, full, and of fine form; a seedling from *Triomphe de l'Exposition*. Introduced 1873.

**Docteur de Chalus*: bright red, violet centre, reverse of petals rose; flowers large and double; habit vigorous, a good rose. Introduced in 1871.

**Docteur Guepin*: rich deep velvety-crimson, or scarlet-crimson, superb colour, moderate size, cupped.

**Docteur Hurta*: rose passing to rosy-purple, a flower very similar in form and colour to *Baronne Prévost*, habit robust.

**Docteur Spitzer*: rich crimson, flowers large, globular, and beautifully formed, habit free.

**Duc de Cases*: deep crimson shaded with violet, colour rich and velvety, petals cupped, flowers large and full; a distinct and good rose, habit moderate.

**Duc de Rohan*: fine brilliant carmine, superb colour, good petal; high centre, and fine outline, habit vigorous, a superb rose. Introduced in 1861.

**Duchesse d'Orleans*: beautiful soft rosy-peach, back of petals glaucous white, a flower of great substance, very full, and of extra large size; a superb rose of vigorous habit.

**Duchess of Edinburgh (Bennett)*: a seedling from *Marguerite de St. Amand*, crossed with *Madame Rothschild*, colour of *La France*; flowers large, globular, and full, the centre very well filled when expanded, handsome foliage, and good habit. Awarded First-class Certificate 1874.

Duchess of Norfolk: vivid crimson, large and full, fine handsome foliage and smooth wood, a first-rate rose and very distinct, habit vigorous. Introduced in 1861.

Duchess of Sutherland: bright glossy pink, changing to pale rose; an old and very beautiful rose, habit vigorous.

**Duchesse d'Aoste*: rich vivid rose, flowers large, full, and well up in the centre, beautifully formed, habit free.

**Duchesse de Caylus*: glowing rosy-crimson, flowers large, full, and beautifully cupped, fine outline with high centre; a superb rose, habit free.

**Duchesse de Medina Calì*: bright crimson changing to violet-rose, flowers large, full, and expanded; a free blooming and distinct rose, habit free.

**Duhamel de Monseau*: fiery-red, splendid colour, like the old *Tuscany*; tolerably well shaped and full. Introduced 1872.

**Duke of Edinburgh*: rich fiery-crimson shaded, flowers large and of good form, colour very attractive; a good rose, and a fine pot rose; raised by Messrs. Paul and Son.

**Duke of Wellington*: rich velvety-crimson, flowers good size, cupped, and well up in the centre; a first-rate rose, habit free.

**Dupuy Jamin*: brilliant carmine-crimson, colour very fine, petals large, broad, and smooth, flowers well formed, luxuriant foliage; a fine rose. Introduced in 1868; habit vigorous.

**Edward Morren*: brilliant rose, resembling *Jules Margottin*, large, full, and fine form; a good rose. Introduced in 1868; habit vigorous.

**Elis Morel*: pale rose, with beautiful clear pink shade, flowers large, full, and fine form; a distinct and beautiful rose.

Elisa Boëlle; white, centre palest flesh, very pretty, in the way of *Mademoiselle Bonnaire*, though the flowers are somewhat larger; a good and distinct rose.

**Elizabeth Vigneron*: bright carmine, flowers very large and double; habit vigorous.

**Emilie Hausberg*: light rose changing to pale satin-rose, large, full, and finally imbricated. Introduced in 1868.

Empereur de Maroc: intensely deep crimson and purple, changing to bluish-purple, petals thick, and the flowers of good form, but not large; a distinct and beautiful rose of free habit.

Ernest Herger: deep bright purple, large and full. Introduced 1873.

Etienne Dubois: deep reddish-purple, changeable, second rate. Introduced 1873.

**Etienne Lecrosnier*: soft greyish-slate, suffused with bright rose, large petals, smooth and well formed. Introduced in 1861.

Eugène Appert: brilliant scarlet-crimson, colour superb and lasting, petals of unusual substance though rather pointed, flowers tolerably well formed, robust habit and fine foliage; a most striking and beautiful rose.

**Exposition de Brie*: rich glowing crimson, flowers large and of excellent form, a superb rose; habit free.

**Felix Genero*: deep violet rose, flowers large, double, and globular, an excellent rose; habit vigorous.

**Felicien David*: brilliant rose, purple shaded, flowers large and very full, partakes of the Bourbon habit; a well formed and good flower. Introduced 1872.

**Fisher Holmes*: rich purplish-crimson, flowers large, cupped, double, and of fine imbricated form; a superb rose.

Francois Barillot: bright cherry-red, with scarlet reflex, large, full, and of fine form. Introduced 1873.

**François Courtin*: purplish-cerise, outside rose with white stripes, flowers large, full, and of fine cupped shape, outer petals large, reflexed, and imbricated, very fragrant; a free and abundant bloomer. Introduced 1873.

**François Fontaine*: dark crimson, very large and globular, a fine rose; habit robust. Introduced in 1867.

**François Lacharme*: brilliant rosy-carmine, suffused with rich purple, petals shell shaped and most beautifully formed, flowers globular when expanded, has a high centre, altogether a most exquisite rose, habit moderate. Introduced in 1861.

François Lowat: bright rose, changing to pale rose, flowers globular, large, and tolerably full; habit free.

**François Treves*: crimson-scarlet, flowers large, smooth, full, and of beautiful globular form; habit free.

**Ferdinand de Lesseps*: fine deep crimson, beautifully shaded, flowers large and exquisitely formed; a superb crimson rose. Introduced in 1869.

Firbreand: dark blackish-maroon, with fiery-red centre, very large, full, and circular outline, very sweet. Introduced by Mr. William Paul, 1873.

**Gabriel de Peyronny*: brilliant rosy-crimson, flowers cupped, large, and well formed, a fine and distinct rose; habit vigorous.

Géant des Batailles: brilliant crimson, large, full, and well formed; still one of the best and most constant flowering roses grown; habit free and good.

General Von Moltke: bright scarlet shaded with carmine, apparently a seedling from *Géant des Batailles*, which it somewhat resembles. Introduced 1873.

**Général Jacqueminot*: brilliant scarlet-crimson, a most superb glowing colour, and a most abundant bloomer; this and the preceding are two fine crimson roses for planting in large groups.

Gloire de Rosomone: brilliant carmine, a large semi-double flower, but most attractive as a pillar rose.

**Gloire de Santenay*: brilliant red with a beautiful violet shade, flowers large, full, and exquisitely formed, a most superb rose, very distinct; habit moderately free.

**Gloire de Vitry*: brilliant carmine, colour exquisite, petals large, smooth, and of fine texture, flowers very large, full, and perfect; a most superb rose of good free habit.

Glory of Waltham: crimson, very large and double, showy; habit robust.

Henri Pajes: soft rose changing to lavender-rose, a very large, full, and globular flower, a distinct and good rose; very vigorous habit. Introduced 1871.

**Henri Ledechaux*: cerise, colour glossy and beautiful, buds pointed and cone-shaped, afterwards partially expanded, a well formed and beautiful rose. Introduced in 1868.

**Hippolyte Flandrin*: rosy-pink, colour glossy and good, petals large, smooth, and fine, flowers very large, full, and imbricated, a superb rose; habit free.

**H. Laurentius* : deep velvety-scarlet and crimson, colour intense and glowing, petals smooth and of fine substance, large and full; habit robust.

**Horace Vernet* : rich brilliant velvety-crimson, petals large and smooth, flowers large, full, and of most perfectly imbricated form; a truly superb rose.

Hortense Mignard : soft rose, a well formed smooth flower; petals shell shaped. Introduced 1873.

**Impératrice Charlotte* : bright rich pink, colour fine, flowers large, beautifully imbricated and well up in the centre, petals large and smooth, a fine rose; habit free.

Jacques Plantier : pale rose, large, full, and globular; a well formed and handsome rose; habit vigorous. Introduced in 1871.

Jean Dalmais : cerise, violet-shaded, smooth shell shaped petals, good circular outline, a fine rose and remarkably sweet. Introduced 1873.

Jean Lambert : deep red, shaded with scarlet, very large, full, and well formed; habit moderate.

**Jean Rosenkrantz* : rich rosy-crimson, flowers large and globular, a beautiful rose with fine handsome foliage; habit vigorous.

**Jean Cherpin* : rich violet-plum, a superb colour, petals smooth and well formed, flowers cupped, a good and distinct rose; habit moderate.

**Jean Goujon* : rich deep rose, flowers extra large and handsome, a robust growing fine rose.

**Jeanne Surey* : bright claret and crimson, flowers very large and full, petals smooth and well formed, a large and handsome rose. Introduced in 1868.

**Jeanne Gros* : satin-rose, shell shaped petals, flowers very large, full, and finely formed; a superb rose. Introduced in 1871.

**John Hopper* : centre brilliant rosy-crimson, the outer petals paler, flowers cupped, full, and well formed, a first-class rose; habit robust.

John Harrison : dark brilliant crimson, heavily shaded with a black velvety hue, a very effective variety. Introduced 1873.

John Laing : crimson-maroon, colour of the old *Tuscany*; flowers moderate size, rather small. Introduced 1873.

John Keynes : bright scarlet shaded with maroon; large, full and showy.

**Jules Margottin*: brilliant glossy pink, a glowing fresh colour, flowers large, beautifully smooth and cupped; a most superb rose, habit robust.

**Julia Touvais*: soft pink with silvery-rose tint, colour maintained clear and decided throughout, flowers large, full, and globular, petals broad, smooth and well formed, a magnificent rose, highly scented; habit vigorous. Introduced in 1868.

**Julia Treyve*: delicate silvery pink, passing to white, colour very chaste, flowers medium size, imbricated, a beautiful and distinct rose; habit free. Introduced in 1868.

Joseph Fiala: rosy-crimson, flowers of moderate size and well formed, a good rose; habit moderate.

Josephine de Beauharnais: pale satin rose, flowers in the form of *Lelia*, very large and globular, a beautiful rose; habit vigorous.

**Kate Hausburgh*: deep rosy-crimson, flowers of extra large size, full and well formed, a distinct and good rose; habit robust.

Kleber: rich deep crimson, thick shell shaped petals, very smooth, beautifully and evenly formed, erect habit, handsome foliage; introduced 1873.

**King's Acre*: rich vermilion, back of the petals satiny-rose, colour superb and distinct, flowers very large, full, and deep, petals smooth, broad, and even; a superb pot rose; raised in 1860, sent out in 1864.

**La Esmeralda*: deep rose, flowers finely formed and very full, high centre and good outline; a first-rate rose, though perhaps too much resembling *Jules Margottin*; introduced in 1862.

**La Reine*: brilliant glossy rose, globular, very large and full; a most superb old variety, of vigorous habit.

**La Duchesse de Morny*: brilliant pleasing rose, flowers large, full, and beautifully formed; a good rose, habit robust.

**La France*: satin-pink, outer petals pale flesh, flowers large and somewhat globular, partakes somewhat of the China Rose, highly fragrant, distinct, and very beautiful; habit free.

**Lady Suffield*: deep purplish-rose, flowers large, cupped, double, and beautifully formed, petals large and smooth; a fine rose.

**La Phocæne*: rich shaded crimson, cupped, full, and perfectly formed; a beautiful rose, habit vigorous.

**La Ville de St. Denis*: rosy-carmine, flowers large and globular, exquisitely formed; a free growing, constant, and excellent rose.

**Laurent Descourt*: mulberry-crimson, colour very beautiful, petals large, broad, and cupped, an exquisitely formed flower; habit free; introduced in 1862.

**Lælia*: satin rose, a noble rose with fine, large, smooth, cup-shaped petals, flowers double and exquisitely formed; a most superb rose; habit moderate.

Lafontaine: purplish-rose, flowers very large, distinct: habit robust.

Le Baron de Rothschild: crimson, fine large, smooth, and well disposed petals, flowers large; habit free; introduced in 1862.

Le Rhone: brilliant crimson, colour superb, and often very beautiful; habit moderate.

Lena Turner: cerise, shaded with violet, flowers large, full, and imbricated; a good rose; introduced in 1869.

L'Esperance: rosy-cerise, colour clear and satiny, flowers large and double, highly scented, a good rose; habit moderate; introduced in 1871.

Le Havre: brilliant vermilion, very large and double; habit moderate; introduced in 1871.

**Leopold I.*: crimson, with soft tint of violet, flowers large, full, and imbricated; a good rose; habit vigorous.

**Leopold II.*: brilliant rosy-vermilion, large broad petals, flowers immensely large, double and well formed, an excellent rose; habit robust; introduced in 1868.

Lord Clyde: rich scarlet-crimson, flowers large, full, and well formed; raised by Messrs. Paul and Son; sent out in 1863.

**Lord Macaulay*: dark velvety crimson, colour dense and glowing, flowers large, double, and well formed, habit moderate; raised by Mr. William Paul; sent out in 1863.

**Lord Raglan*: deep crimson, changing to mottled crimson, flowers large, full, and well formed, habit vigorous; a very superb rose.

**Lord Herbert*: rich carmine, petals very smooth and perfectly imbricated, flowers large and very full; a superb rose.

**Louisa Wood*: bright rose, flowers large and full, with large well formed petals, a superb rose, free flowering, and good habit; introduced in 1869.

Louis Charlin: dark crimson, colour of *Pauline Lansonzeur*, a good, full, and well formed flower, habit vigorous; introduced in 1871.

Louise Corbis: carmine-rose, flowers large, full, and well formed, a very abundant bloomer, and a fine rose; introduced in 1871.

Louise Noisette: deep bright rose or rosy-red, colour very beautiful, flowers very large and full, globular, a good rose; habit robust.

Louise Magnan: white, slightly tinted, large and full; a good rose, but delicate.

**Louis Van Houtte*: velvety crimson, mottled and shaded with violet-purple, flowers very large, full, and cupped, a superb rose; habit vigorous.

Louise d'Arzens: creamy-white, beautifully cupped and well formed, flowers rather too small, though distinct, and very pretty; habit moderate.

**Louise Peyronny*: satin rose, globular, fine bold petal, a handsome rose; habit moderate.

**Lyonnais*: satin rose, colour clear and beautiful, flowers cupped, very large and full; a very distinct and superb rose, habit vigorous; introduced in 1871.

McMahon: rose, changing to lilac-rose; a large flower with petals somewhat crowded and coarse, in the way of *Madame Moreau*; introduced 1872.

**Madame Bellon*: brilliant cerise, flowers very large, and well formed, full high centre; a very fine rose; habit vigorous. Introduced in 1871.

**Madame Bellinder Ker* : white, exquisitely shaded in the centre with soft fawny flesh, flowers moderate size, beautifully imbricated, full ; habit moderate.

Madame Boll : delicate rosy-peach, flowers large, very full, and well formed ; a rose of unusually large size, and of very robust habit.

Madame Boutin : cerise, a beautiful clear colour, flowers very large and full, petals broad, even, and well disposed ; an excellent rose of robust habit. Introduced in 1861.

Madame Bernutz : rose changing to pale rose, flowers very large and full ; a large rose equal in size to *Monsieur Paul Neron*. Introduced 1873.

Madame Brianson : brilliant carmine, good colour, flowers large and full, and tolerably well formed ; a good rose ; habit moderate.

**Madame Caillat* : clear brilliant rose, flowers large and full, petals smooth, broad, and even ; handsome foliage and smooth wood ; a first-rate rose ; habit robust. Introduced in 1861.

Madame Chate : bright cerise, flowers cupped, large and full ; a good rose. Introduced in 1871.

Madame Chirard : clear rose, flowers very large, globular ; an exquisite rose.

Madame Charles Crapelet : rosy-carmine, large smooth petals, exquisitely formed and beautifully disposed ; a beautiful rose ; habit free.

**Madame de Ridder* : rich dark shaded crimson, large, handsome, well formed flowers ; habit vigorous ; a most excellent rose. Introduced in 1871.

Madame de Saint Pulgent : dark velvety crimson shaded with deep plum, a well formed and handsome flower ; habit vigorous. Introduced in 1871.

Madame George Schwartz : glossy rose with soft lavender shade, flowers large, full, and cupped, a very deep well formed flower, and a fine rose ; habit vigorous. Introduced in 1871.

**Madame Guillot de Mont Favet* : blush, centre flesh, colour of *Baroness Rothschild*, flowers globular, large and full ; a very fine rose ; habit vigorous. Introduced in 1871.

Madame Hippolyte Jamain: blush, flowers globular, large, and full; habit moderate. Introduced in 1871.

**Madame Laurent*: bright rose, fine large globular flower, handsome and distinct; a fine rose; habit vigorous. Introduced in 1871.

Madame la Marquise de Chambon: salmon-rose, deeper in the centre, very full and perfect form, a new colour, distinct and fine; habit robust. Introduced in 1871.

**Madame Charles Wood*: beautiful clear rosy-crimson, petals large and of good substance, expanded, full, and beautifully formed; a distinct and magnificent rose; habit moderate. Introduced in 1861.

**Madame Clemence Joigneaux*: brilliant rosy-carmine, fine large petal, flowers very large, deep, and very full; habit very robust; a superb rose.

**Madame Creyton*: brilliant vermilion, shaded with violet-rose, flowers very large and full, petals large, smooth, and even, a fine rose. Introduced in 1868; habit vigorous.

**Madame Clert*: salmon-pink, large flowers, imbricated and well formed, distinct. Introduced in 1868.

**Madame Decour*: rich vermilion-rose, colour transparent, flowers large, full, and erect, petals remarkably smooth and shell-shaped; an exquisite rose. Introduced in 1868; habit robust.

**Madame Domage*: bright cerise, a most superb colour; flowers very large, handsome, and good; robust habit, with very thorny wood.

**Madame Derroux Douville*: light satin-rose, shaded, flowers even and beautifully formed; habit vigorous.

Madame Lacharme: white, the centre the palest blush colour, beautifully clear and wax-like, a large circular cupped shaped flower, and highly scented; requires fine dry weather to open. Introduced 1872.

**Madame de Cambacères*: brilliant rose, large and full, buds very handsome, an abundant bloomer, and an excellent robust growing rose.

Madame Emma Combey: bright carmine flowers, very similar to the old *Duchess of Norfolk*, wood and foliage similar. Introduced in 1872.

Madame Lefebvre Bernard: bright salmon-rose, colour distinct and fine, smooth shell-shaped petals, very large and full. Introduced in 1871.

Madame Liabaud: white, centre flesh, changing to pure white, flowers large, full, and finely formed; habit moderate.

**Madame Scipion Cochet*: bright cherry-red, large, full, and very well formed; a superb rose. Introduced in 1871.

**Madame Thérèse de Parrieu*: brilliant carmine, beautiful soft colour, and even throughout; a very distinct and first-rate rose; habit vigorous. Introduced in 1871.

Madame Eugène Appert: fresh rosy-pink, colour clear and good, flowers large, full, and beautifully cupped, highly scented, habit vigorous.

**Madame Dusour*: vermilion tinted with white, flowers large, full, and well formed, a very attractive rose; habit vigorous.

**Madame Emain*: magenta-rose, fine colour, flowers large and full, petals remarkably even and well disposed; a superb rose.

**Madame Fillon*: fresh rosy-pink, flowers large, full, and of good form, a very distinct and beautiful rose, very fragrant; habit moderate.

**Madame Furtado*: brilliant carmine-rose, colour fresh and beautiful, flowers globular, of great depth and fine outline, full and exquisitely formed, the outer petals imbricated and beautifully disposed, a fine rose: habit dwarf.

Madame George Paul: bright rosy-crimson, flowers large and globular; habit robust.

Madame Grondier: pale rose, large, globular, a handsome rose in the way of *Monsieur Noman*; habit vigorous.

Madame Guillot Villeneuve: pale satin-rose, flowers of good size, cupped and beautifully formed; a good show flower. Introduced in 1873.

Madame Hector Jacquin: brilliant clear rose, superb colour, large handsome petals and buds, not very full; habit robust.

**Madame Julie Daran*: violet-crimson, flowers cupped and beautifully formed, having large smooth petals of good quality; a rose of vigorous habit. Introduced in 1861.

**Madame Julie Bourgeois*: colour brilliant crimson with a beautiful violet shade, full and well formed; a good rose. Introduced in 1868; habit vigorous.

**Madame Jacquier*: lavender-rose veined and shaded bright rose, flowers globular, petals deep and shell shaped, handsome in the bud. Introduced in 1868: habit vigorous.

**Madame Humnabelle*: beautiful light rose shaded with carmine, very large and finely formed; very sweet. Introduced in 1873.

**Madame Knorr*: deep brilliant rose, outer petals whitish; a free growing, distinct, and very beautiful rose.

**Madame la Baronne de Rothschild*: palest flesh, colour most chaste and delicate, petals large and smooth, flowers large, double, and of fine globular form, very distinct and beautiful, and a most superb rose. Introduced in 1867; habit robust.

Madame la Comtesse de Maussac: brilliant cerise, beautiful colour, flowers very large and very full; a handsome rose, of *Baron Prévost* type. Introduced in 1873.

**Madame Lierval*: pale rose, centre rosy-pink with a soft lilac tint, flowers very large, full, and cupped, an exquisitely formed flower with high centre. Introduced in 1868; habit vigorous.

**Madame Louise Levêque*: cerise, colour brilliant and distinct, flowers very large, full, and expanded; a good rose. Introduced in 1873.

Madame Louis Paillet: bright salmon-pink, satiny, flowers good size and well formed. Introduced in 1872.

**Madame Marie Girodte*: salmon-pink, outer petals paler, flowers expanded, full, and well formed, a good rose; habit very robust.

Madame Marie Duncan: satin-rose, flowers moderate size, clustering; only second-rate. Introduced in 1873.

**Madame Marie Finger*: flesh, centre deep salmon-pink, flowers large, globular, and well formed; a fine distinct rose. Introduced in 1873.

**Madame Marius Cote*: dark crimson, bright and well shaded, very large, fine circular outline, smooth guard petal, expanded in the way of *Madame Moreau*; a fine rose. Introduced in 1872.

**Madame Moreau*: deep crimson suffused with purple, flowers expanded, very large and very full, a fine rose with a good outside petal; habit moderate.

**Madame Thérèse Levot*: light carmine-rose, flowers large and full, beautifully imbricated; a superb rose. Introduced in 1867; habit vigorous.

Madame Valembourg: brilliant scarlet-crimson finely suffused or tinted with purple, petals large and smooth, flowers large, cupped, and well formed. Introduced in 1862.

Madame Nachury: fine satin-like rose with a soft lavender shade, a new colour; flowers large, full, and cupped; distinct and well formed. Introduced in 1873.

Madame Saison Lierval: rose colour, and shape of *Jules Margottin*; a very full flower and well formed; a good rose. Introduced in 1873.

Madame Prud'homme: bright rose, centre darker, large, and very full, expanded; robust habit. Introduced in 1873.

Madame Soubeyron: bright rose, flowers small, well formed, and highly scented. Introduced in 1872.

**Madame Victor Verdier*: brilliant rosy-crimson, colour very beautiful, flowers large, full, and well formed, and very lasting; a distinct and very superb rose, habit vigorous.

**Madame Vidot*: the palest flesh, often pure white, flowers large and full, most beautifully and perfectly formed, habit moderate; a superb rose.

Madame Vigneron: soft rose, flowers moderate size, very fragrant, habit vigorous.

Madame William Paul: rich dark crimson suffused with purple, petals large and of good substance, flowers large, cupped, and well formed; a fine rose. Introduced in 1862.

Mademoiselle Marie Gonod: palest flesh changing to pure white, the edges of the petals tinted, flowers cupped, full, and beautifully formed; habit moderate. Introduced in 1870.

Mademoiselle Adèle Bordeaux: brilliant clear red, the reflex of the petals whitish, cupped, large and fine form. Introduced in 1873.

**Mademoiselle Christine Nilsson*: deep rose shaded with plum, flowers large, full, and tolerably well formed; habit vigorous.

**Mademoiselle Amelie Halphen*: brilliant carmine changing to lake, flowers half cupped, petals smooth and good; very free blooming and good rose; habit moderate.

**Mademoiselle Bonnaire*: pure white, centre shaded palest flesh; flowers of medium size, full and well formed; a beautiful free blooming and distinct rose; habit free.

Mademoiselle Humaine: soft satin-rose, cupped; shape of *Comtesse Chabillant*, a pretty well formed flower, very fragrant; a good rose. Introduced in 1873.

Mademoiselle Eugénie Savary: pale peach, centre pink, cupped and well formed, handsome foliage and a good rose. Introduced in 1872.

Mademoiselle Fernande de la Forest: centre deep peach colour, outer petals paler; a large globular flower. Introduced in 1873.

Mademoiselle Eugénie Verdier: pearly-white with the palest flesh centre, flowers of moderate size, cupped, and finely formed; distinct, and very beautiful.

Mademoiselle Jeanne Marix: bright rose marbled with crimson, flowers very large, full, and globular; habit robust.

Mademoiselle Julie Pererard: lavender, bright rose towards the centre, flowers large and somewhat rough. Introduced in 1872.

**Mademoiselle Marie Cointet*: bright satin-pink, outer petals paler, glossy pink petals, flowers somewhat resembling *Marguerite de St. Amand*; a very good rose of moderate habit. Introduced in 1872.

**Mademoiselle Marie Rady*: rich rose, flowers large and beautifully imbricated; a superb rose, habit vigorous.

Mademoiselle Philberte Pellat: bright carmine-rose, flowers well formed and cupped, shape of *Felix Genaro*; vigorous, good rose. Introduced 1873.

Mademoiselle Marie de la Villeboisnet: pale rose changing to flesh, flowers very large, expanded; a well formed flower, habit robust.

**Mademoiselle Marguerite Dombrain*: satin rose, flowers large, full and globular; a distinct and fine rose; habit vigorous.

**Maréchal Vaillant*: rosy-crimson, colour bright, flowers very large and handsome, habit vigorous.

**Marguerite de St. Amand*: glossy satin rose, a beautiful fresh colour, flowers extra large, globular and well formed; a beautiful and distinct rose, habit moderate.

Marguerite Jamain: beautiful flesh colour, very delicate, flowers large, full, and well formed; a seedling from *Baronne Prevost*; vigorous habit. Introduced 1873.

**Marie Beauman*: rich carmine-crimson, flowers large and of exquisite form, perfectly full, and very beautiful, habit vigorous.

**Maurice Bernardin*: rich crimson shaded with violet, flowers full and well formed, a fine rose. Introduced in 1861.

**Marquise de Mortemart*: blush-white, centre pale flesh, colour delicate and beautiful, petals smooth and even, flowers large and cupped; an exquisite rose, and one of the best light varieties. Introduced in 1868; habit vigorous.

**Marquise de Castellane*: deep cerise, colour clear and good, flowers large, circular, and full; a superb rose, habit robust. Introduced in 1869.

Marquis de Ligneris: dark lilac-rose, flowers large, deep, and finely cupped; a very excellent rose.

**Marquise de Verdun*: bright rose or rosy-carmine, very large and showy. Introduced in 1868; habit vigorous.

**Marquise de Gibot*: pale rose, flowers large, full, and globular; a fine and distinct rose. Introduced in 1868; habit vigorous.

Maxime de la Rocheterie: rich plum shaded with crimson, flowers large, smooth, and expanded; habit vigorous. Introduced in 1871.

Maria Theresia: soft rose, with a beautiful slate-coloured shade, large, globular, and fine form, somewhat resembling *Nardy Frères*; a first-rate rose, habit vigorous. Introduced in 1873.

Minerva: rich velvety-crimson, shaded with deep velvety-plum colour, smooth shell-shaped petals, in form like a *Camellia*, distinct; habit vigorous. Introduced in 1868.

Mistress Laing: lavender and bright rose, reverse of petals whitish, somewhat thin in substance, vigorous. Introduced 1872.

**Miss Poole*: pale pink, a nicely formed pretty flower. Introduced in 1869.

Mistress Veitch: bright rose, showy, colour of *Victor Verdier*, but darker, flowers very large, and when it comes sufficiently full, very handsome; habit moderate. Introduced 1872.

**Monsieur Boncenne*: intensely dark crimson, colour very superb, flowers large, full, and well formed; one of the best dark flowers; habit vigorous.

Monsieur Cordier: brilliant sealing-wax-red, a very large, full, expanded flower; habit robust. Introduced in 1860.

Monsieur Claude Levet: intense deep rich crimson, very smooth, large, even petals; a very beautiful rose, but scarcely full enough, habit moderate. Introduced 1872.

**Monsieur Etienne Dupuy*: pale satin and rosy-pink, colour beautifully clear and fresh, cupped, large, and full; a distinct and very fine rose; habit vigorous. Introduced 1873.

**Monsieur Etienne Levet*: vermilion with a soft lavender shade, velvety, flowers very large and full, petals exquisitely smooth and shell-shaped, superb, and one of the finest roses. Introduced in 1872.

**Monsieur François Michelin*: fine deep rose, reverse of petals silvery-white, flowers large and full; habit vigorous. Introduced in 1871.

Monsieur Paul Neron: pale soft rose, violet shade, flowers immensely large and full; a superb rose, habit robust.

Monsieur Pierre Seletzski: rich violet and crimson, petals even, smooth, and good; a fine cup shaped flower, distinct handsome foliage, and vigorous habit. Introduced 1873.

Monsieur de Montigny: brilliant rose colour, fresh and beautiful, flowers very large and well formed; a handsome robust growing rose.

**Monsieur Noman*: delicate rosy-pink, flowers large, of fine globular form; a most superb rose; habit vigorous. Introduced in 1867.

**Monsieur Woolfield*: rich rosy-pink, flowers large, full, and well formed; a fine rose, resembling (but much fuller) *Centifolia rosea*; habit vigorous.

**Monsieur Joursaux*: cerise, flowers large, deep, and well formed, habit vigorous. Introduced in 1868.

**Mrs. Rivers*: pale satin-rose, sometimes flesh, flowers large, full, cupped, and most beautifully formed; a superb rose, habit free.

**Nardy Frères*: rose, shaded with soft lavender, flowers very large, full, and well formed; a very distinct and first-rate rose. Introduced in 1868; habit vigorous.

**Olivier Delhomme*: brilliant rosy-carmine, flowers well formed, of good depth and high centre, fine petal and good outline; a superb rose. Introduced in 1861.

Olga Mariz: beautiful white, tinged with flesh colour, medium size, vigorous habit. Introduced in 1873.

**Paul Verdier*: rich rosy-crimson, flowers large, double, and of fine imbricated form; a beautiful rose, habit very vigorous, forming a good pillar rose.

**Paul Desgrand*: deep rosy-crimson, suffused with rich mulberry, flowers large and full, petals smooth and well disposed; a fine rose, habit vigorous.

Pauline Talabot: dazzling rose or carmine, a very free bloomer, and altogether of great merit. Introduced 1873.

Pavillon de Pregny: rosy-lavender, base of the petals white, small, clustering; very pretty, habit free.

Peach Blossom: delicate peach, a new and beautiful colour, large, full, and fine shape. Introduced by Mr. Wm. Paul, in 1873.

**Pitord*: light crimson or scarlet, globular and well formed, distinct, habit vigorous. Introduced in 1867.

**Pierre Notling*: deep velvety shaded crimson, a fine deep globular flower, very large; a superb rose, habit vigorous.

Perle Blanche: white, centre blush, flowers large, full, and well formed; does not open freely; robust habit. Introduced in 1872.

Perle des Blanches; creamy-white, changing to pure white, foliage of *Boule de Neige*, and flowers somewhat similar; vigorous habit. Introduced 1872.

Perfection des Blanches: beautiful white and flesh-colour, of medium size, full and well formed. Introduced in 1873.

Perfection de Lyon: deep rose shaded, the undersides of the petals paler, a very fine globular flower; habit robust.

Pierre Izambert: velvety crimson, outer petals deep red, large and handsome; habit vigorous. Introduced in 1871.

President Grevy: deep crimson and rose, shaded with purple, large, full, and well formed; a good rose; habit vigorous. Introduced in 1872.

President Hardy: purplish-carmine and rose, very large, full, and of fine form; a seedling from *Jules Margottin*. Introduced in 1873.

**President Thiers*: brilliant vermilion-crimson, beautiful clear colour, flowers immensely large and full, petals large, smooth, and well formed; a grand rose; habit vigorous.

**President Willermoz*: rich brilliant carmine with a very soft and pleasing violet tint, colour new and distinct, fine petal and very beautiful; habit vigorous. Introduced in 1867.

**Prince Camille de Rohan*: rich dark maroon-crimson, colour superb, flowers of moderate size and double; one of the finest dark roses in cultivation. Introduced in 1861.

**Prince Henri de Pays Bas*: bright crimson and velvety-purple, flowers full sized, globular, and well formed; habit vigorous.

**Prince Humbert*: deep rich velvety-crimson shaded with blackish-purple, petals large, flowers large, double, and well formed; a good rose; habit vigorous.

Prince Imperial: rosy-pink, flowers very large, full, and globular, the largest rose grown; habit vigorous.

**Prince Leon*: light rosy-crimson, petals very thick, and flowers exquisitely formed; a very superb rose, growth moderate, though its wood is robust and foliage fine.

Prince Stirby: superb rose colour, flowers very large and full; habit vigorous. Introduced in 1871.

Prince of Wales (Laxton): deep silvery-pink, very large, full, globular shape, and finely formed, petals somewhat thin, though a distinct and fine rose; habit moderate. Introduced in 1870.

Prince Paul Demidoff: soft satin-rose, very large, globular, and well formed, a handsome flower; vigorous habit. Introduced in 1873.

**Princess Mary of Cambridge*: pale silvery-pink, flowers large, full, and high in the centre; a beautiful rose.

**Princess Beatrice*: flowers deep pink with clear blush margin, large, full, and of globular form, a distinct and fine rose, raised by Mr. W. Paul, and introduced in 1872.

Princess Christian: rosy-peach shaded with salmon, very large handsome egg-shaped buds, a very fine rose grown under glass, but does not always open out of doors. Raised by Mr. William Paul, and introduced in 1870.

Princess Louise (Laxton): white, sometimes bluish-white, pretty, but wanting in substance. Introduced in 1870.

**Princess of Wales*: carmine, colour bright and beautiful, flowers good size, cupped, and well formed; a fine rose, habit vigorous.

Princess Louise Victoria (Knight): flesh changing to blush, compact and moderate size, clustering and very pretty, a good pillar or climbing rose, raised by Mr. Knight of Hailsham. Introduced in 1872.

Queen of Waltham: beautiful rosy cherry, a very distinct and lovely colour; large, full, and double. Introduced by Mr. William Paul, 1875.

**Queen Victoria*: flesh shaded with pink towards the centre, very large, full and beautifully formed, flowers in large clusters; a beautiful rose, habit moderate.

**Reine Blanche*: pearly-white, centre the palest flesh, flowers large, full and cupped, petals smooth and finely disposed; a charming rose, and one of the best light varieties introduced in 1868; habit free.

**Reine Daniel*: rich crimson with a soft carmine-rose shade, colour beautiful and distinct, petals large and smooth, flowers large, full, and cupped; a fine rose. Introduced in 1868.

**Reine du Midi*: satin-rose, petals large and smooth, flowers very large and of fine globular form; a fine rose, somewhat resembling *La Reine*, but much larger, habit vigorous. Introduced in 1868.

Reynolds Hole: maroon, shaded with crimson, flowers of moderate size, perfectly formed, a fine rose, of new and distinct colour. Introduced by Messrs. Paul and Son, 1872.

**Richard Wallace*: bright scarlet-crimson, changing to rosy-crimson, a well built high-centred flower, very large and full; habit vigorous, a fine rose. Introduced 1871.

Rosa Bonheur: pale rose, full, pretty small flowers; dwarf habit. Introduced in 1871.

**Rushton Radcliffe*: deep crimson, flowers large, full and expanded; a good rose, habit moderate.

**Senateur Vaisse*: intense glowing scarlet, fine petal, flowers full, with high centre, large and perfectly formed, free growing, handsome foliage, and one of the very best roses in cultivation.

**Sir Garnet Wolseley*: rich vermilion shaded with bright carmine, and the colour well maintained throughout, flowers very large, full, and perfectly formed, standing out bold and erect; habit strong and

vigorous, producing flowers most freely, a seedling from *Prince Camille de Rohan*, raised by Mr. Cranston, and introduced 1875. This rose was awarded First-class Certificate at the Grand National Rose Show, July 1st, 1874, also at Oxford on June 25th, 1874.

**Sophie Coquerelle*: blush, centre flesh colour, clear and good, flowers globular, very large, full and well formed; a fine light rose, habit vigorous.

Souvenir de Général Douai: brilliant bright rose, flowers large, globular and well formed; habit robust. Introduced in 1871.

Souvenir de Julie Gonod: soft rose-veined, flowers large and full, in the way of *Centifolia rosea*; habit vigorous. Introduced in 1871.

Souvenir de Charles Montault: velvety purple suffused with crimson, large and double; free blooming and pretty, habit free.

**Souvenir de Dr. Jamin*: deep rich plum colour, velvety and superb, petals thick and smooth, flowers moderate size; distinct and beautiful.

Souvenir de J. G. Veitch: deep crimson, shaded with violet-purple, flowers imbricated. Introduced 1872.

Souvenir de Mademoiselle Alexis Michaut: brilliant rose, flowers moderate size, shape of old *Baronne Haliez*, rather small; vigorous habit. Introduced 1873.

Souvenir de Spa: deep red with scarlet reflex, large, full and globular, and very well formed; a seedling from *Madame Victor Verdier*; vigorous habit. Introduced 1873.

Souvenir de Monsieur Boll: bright shaded red, very large, full, and well formed, habit very robust.

**Souvenir de Poiteau*: salmon-pink, beautifully shaded, the outer petals becoming paler, flowers extra large, half globular, when fully open expanded; a magnificent rose, habit robust. Introduced 1868.

Souvenir de William Wood: centre deep violet-purple, outer petals rich velvety crimson, colour superb, though somewhat inclined to burn, flowers good size, compact and full, habit free.

Star of Waltham: deep crimson, colour very rich and effective, very large, double, and of fine form, smooth petals and fine substance, said to be a very fine rose. Introduced by Mr. William Paul, 1875.

St. George: flowers crimson, shaded with black-purple, large, full, and of good form, habit and foliage good, a fine new dark rose. Introduced by Mr. William Paul, 1873.

Thomas Methven : brilliant carmine, large, full, and finely formed flower ; habit vigorous.

Theodore Bucheten : velvety purple with fiery centre, flowers very large and full, and well formed. Introduced 1873.

Thomas Mills : flowers extra large, full, and of fine cup shape ; colour dazzling bright rosy-carmine, with whitish stripes ; a very free bloomer. Introduced 1873.

Thorin : clear rich carmine, petals large, and buds handsome, flowers scarcely full enough ; distinct, habit vigorous.

**Thyra Hammerick* : delicate clear flesh changing to paler flesh, colour beautiful and even throughout, flowers erect, very large, full and cupped ; a superb rose, and one of the best of its colour. Introduced in 1868.

Triomphe de Rosomone : deep black velvety-crimson ; shaded with fine red on the border of the petals, large and full ; habit vigorous. Introduced 1873.

**Triomphe de Caen* : deep velvety-purple and crimson, flowers very large and full, a superb rose ; habit vigorous.

Triomphe de Villecreuse : violet-crimson shaded with mulberry, colour very distinct and beautiful, flowers large, full and expanded ; distinct, habit dwarf.

Vainqueur de Goliath : mulberry-crimson, a good and distinct colour, flowers large and full, a handsome rose ; habit free. Introduced in 1862.

Victor Vernet : dark crimson shaded with violet, flowers moderate size ; habit vigorous. Introduced in 1871.

**Victor Verdier* : deep rose, centre brilliant rose, a beautiful colour, flowers very large and full, an exquisite rose, free-flowering, and of good habit.

**Victor le Bihan* : brilliant carmine-rose, flowers large and full, petals large, smooth, and well disposed ; habit vigorous, with handsome foliage ; a superb rose. Introduced in 1868.

Ville de Lyon : metallic-rose and silvery-white, flowers large, full, and of fine form ; habit vigorous.

Vicomte Vigier : intense rich velvety crimson and lake, beautifully shaded, large petal, a well formed globular flower, and distinct ; habit free. Introduced in 1861.

Vicomtesse de Vesins : rich crimson, flowers large, and when half opened, very beautiful ; habit vigorous.

Virginal: pearly-white, with the palest flesh centre, flowers of moderate size and well formed, though not full; an exquisite rose, but a delicate and unsatisfactory grower.

Wilhelm Pfitzer: rich scarlet-crimson, centre velvety purple, petals large and smooth, flowers globular; a first-class rose, with good free habit. Introduced in 1861.

William Griffiths: glossy pink changing to light satin-rose, petals curiously curved; a very beautiful and free growing rose.

**Xavier Olibo*: rich velvety crimson, often blackish-crimson, the colour of this rose is most superb, petals large and smooth, flowers finely cupped and very beautiful; habit moderate.

THE BOURBON ROSE.

The Bourbon Rose, a native of the Isle of Bourbon, was introduced into this country about the year 1825. These Roses are distinguishable by their large handsome shining foliage, and profusion of bloom throughout the autumn. Although they flower early as well as late (with few exceptions), it is rarely that blooms of the natural size, or with characteristic colours, are produced until the cool autumnal weather sets in, when for brilliancy and tone of colour they are unsurpassed.

Many of the varieties are of dwarf, compact habit, others of moderate growth, and some vigorous and robust, forming the best of pillar roses, and having fine handsome foliage and vigorous growth; they are well adapted for wall roses. The varieties designated as free, vigorous, and robust; are the only suitable kinds for growing as standards, the moderate and dwarf sorts should not be grown higher than half-standards, and many are better even as dwarf standards.

**Acidalis*: white, in dry weather beautifully tinted; a very good white rose, suitable for a pillar, wall, or tall standard.

**Apolline*: light pink, a beautiful rose and a good weeper; pillar or wall rose.

Armosa: bright pink, flowers small and double, a very pretty rose for bedding; habit dwarf.

**Baronne Gonella*: bright cerise, with a fine bronzy hue, petals large, smooth, thick, and beautifully disposed; flowers large, double and exquisitely formed; a superb rose of free habit.

**Baronne de Noirmont*: fresh rosy-pink, petals of good substance, flowers large, full, and beautifully formed; with a delicious violet scent; a very fine rose, habit robust.

Bouquet de Flore: deep carmine, flowers not very double, but effective as a pillar or wall rose.

**Catherine Guillot*: carmine-rose, beautiful even smooth petals, flowers large and beautifully formed; a fine rose of vigorous habit.

**Louise Margottin*: satin-rose, flowers large and full, a good rose. Introduced in 1862.

Louise Odier: rosy-pink, full and finely formed; a free growing and beautiful rose.

Madame Joseph Guyot: rich violet-crimson, petals smooth, shell-shaped, flowers globular, large, full, and exquisitely formed; habit moderate.

Mademoiselle Emain: the palest flesh, changing to pure white, buds slightly tinted, flowers large, full, and perfectly formed; a free flowering and beautiful rose of moderate habit. Introduced in 1861.

Madame Scipion: very bright rose, large cupped and finely formed, a fine pillar or wall rose; habit vigorous. Introduced 1872.

**Michael Bonnet*: fresh rose, flowers very large, full, and beautifully formed; a superb rose, habit vigorous.

**Modèle de Perfection*; pale satin-pink, fading off to a beautiful carmine tint, flowers of medium size, full, and beautifully formed.

Pierre de St. Cyr: light pink, free flowering, a fine pillar rose.

**Queen*: fawn and rose, of moderate size and not very double, though a most constant rose and one of the most beautiful; habit free.

**Sir Joseph Paxton*: bright rose, a very showy flower with tolerably good properties, vigorous in habit; a most useful rose for a pillar, wall, or tall standard.

**Souvenir de la Malmaison*: blush, centre clear flesh, flowers very large, very full, and well formed; one of the finest roses grown, though in very cold situations it does not at all seasons open; habit vigorous; a bed of it should be grown upon its own roots.

Souvenir d'Adèle Launay: pale rose, globular; a pretty well formed flower, with good foliage and vigorous habit; a good pillar or wall rose. Introduced 1872.

THE CHINA ROSE.

(*Rosa Indica*).

The China Rose, or *Rosa Indica*, is a native of China, and was introduced into this country about the year 1789: from this and the Old Crimson variety have sprung all the members of this family. They are most abundant autumnal blooming roses. Some are most brilliant and attractive in colour, others are of the purest white. Few of the kinds are suited for standards, though most of them succeed well when budded upon low stocks. For small beds grown upon their own roots they are well suited, and produce an abundance of flowers throughout the autumn. Perhaps the greatest objection to the China roses is their having little or no scent. They succeed best in warm dry soil, with a moderate dressing of well decayed manure and leaf-mould once a year.

**Archduke Charles*: pale rose changing to deep crimson, curiously marbled and beautiful, habit free.

**Cramoisie Supérieure*: rich glowing crimson, most distinct and beautiful, either for pot culture, or as a bedding-out rose; habit free.

Ducher: cream changing to white, flowers moderate size; habit free.

Eugène Beauharnais: amaranth, double and of good form; a pretty rose of moderate habit.

**Fabvier*: brilliant glowing crimson, flowers only semi-double, but a most useful and attractive rose; has a fine effect when bedded upon its own roots; habit free and most abundant flowering.

Louis Philippe: rosy-crimson, sometimes dark crimson, flowers large and full.

**Madame Bréon*: brilliant rose, a well formed good flower; a good pot rose; moderate in habit.

**Marjolin*: rich dark crimson, flowers very large and full; makes a good standard, habit free.

**Mrs. Bosanquet*: pale flesh, delicate and waxy in appearance, very free blooming and beautiful; a vigorous grower and makes a good standard.

Old Blush: the type of the China rose, still considered a useful rose for borders, also a good wall rose.

Old Crimson: brilliant crimson, introduced soon after the preceding; from these two varieties have sprung all our Chinese roses.

**President D'Obélèque*: cerise, often changing to crimson; pretty and distinct.

Sully: creamy-white; pretty.

**White*: pure white, semi-double; a beautiful rose for bedding.

THE MINIATURE CHINA ROSE.

(*Rosa Lawrenceana*.)

The Miniature China or Fairy Rose is supposed to be a distinct species, introduced from China in 1810. These roses are of the dwarfiest habit possible, growing only a few inches in height, and yet loaded with beautiful flowers of the smallest size. They may truly be called roses in miniature. There are some fifteen or sixteen varieties, but the most popular and generally cultivated variety is the *Fairy*; flowers rosy-pink. If they are planted out, they should have a warm light dry soil; but for pot culture they seem to be best suited.

THE TEA-SCENTED ROSE.

(Rosa Indica odorata.)

The *Rosa odorata*, one of the most tender, though one of the most fragrant of all roses, was introduced from China in 1810: this and the Old Yellow Tea-scented Rose introduced in 1824, became the parents of all the beautiful varieties in this class. The whole tribe are more or less tender, though many of the varieties possess greater vigour, and a more hardy constitution than the parent plants.

These roses (excepting in the north and colder parts of England) may be grown successfully as low standards, and no roses are more beautiful, or produce blooms in greater profusion throughout August and September: for beds upon their own roots they are alike suitable, and very beautiful. In conservatories they grow and bloom in such perfection, and with so little trouble, that here they may be considered to be quite at home. For pot culture, too, they are perhaps the finest of all roses. Directions for preparing beds for the Tea-scented Rose, protecting, &c., will be found at pages 17 and 29.

**Abricoté*: pale fawn, with deeper centre; an excellent, hardy, free rose.

**Adam*: flesh, centre salmon and fawn, moderately hardy and very beautiful; one of the most charming of the Tea roses.

**Adrienne Christophle*: yellow, centre copper and apricot, shaded with rosy-peach, sometimes deep yellow, distinct and beautiful. Introduced in 1868; habit moderate.

**Alba Rosea*: white, centre rose, flowers large, full, and beautiful; habit vigorous.

**Amabilis*: flesh and fawn, centre rose, large, full; very sweet.

Anna Olivier: flesh and buff shaded with rose, flowers tolerably large, smooth and beautiful; habit moderate. Introduced 1872.

**Auguste Vacher*: copper or deep fawn, with salmon tint, of good size and distinct, good habit.

Auguste Oger: orange and rose, large and full; habit moderate.

Barbot: cream tinted with rose, flowers large and full; a good vigorous growing, and tolerably hardy rose.

Belle Lyonnaise: deep canary-yellow, flowers globular, large and full, a very fine rose; habit vigorous. Introduced 1869.

Belle Macconnaise: buff, beautifully tinted with carmine, buds salmon and fawn, flowers large, full, and well formed; a beautiful and distinct rose; habit vigorous.

Bougère: salmon and fawn, flowers very large and full; a good rose of vigorous habit.

**Bouton d'Or*: rich orange-yellow, flowers globular, moderate size and beautiful.

**Bride of Abydos*: white, centre tinted with pink; a very beautiful but rather loose rose; habit delicate.

**Buret*: rosy-crimson, remarkably sweet, pretty, and distinct; habit vigorous.

Canari: clear pale yellow, beautiful only in the bud, free habit.

Caroline: pale rosy-pink; a very good, hardy, free growing rose.

**Cheshunt Hybrid*: colour cherry-carmine, large, full, open flower, very hardy, free, and distinct; a fine pillar or wall rose. Introduced by Messrs. Paul and Sons, 1872.

**Catherine Mermet*: bright flesh-coloured rose, large, full, and finely formed; a superb rose, habit free.

Chamois: buds deep apricot, when fully opened nankeen colour, distinct, flowers small, habit moderate. Introduced in 1870.

**Clara Sylvain*: pure white, large and full, pretty; habit moderate.

**Clotilde*: creamy-white, centre bright salmon-pink, flowers of moderate size, and full.

**Climbing Devoniensis*: creamy-white, flowers similar to the old *Devoniensis*, but with much more vigorous habit, forming a fine climbing or wall rose; shoots are often produced six or eight feet in length in one season.

**Comte de Paris*: pale flesh, flowers large and full; a superb rose, habit dwarf.

Comte Taverna: pale lemon, in the way of *Triomphe de Rennes*, flowers cupped and well formed, a first-rate rose, habit moderate. Introduced in 1871.

**Comtesse de Nadaillac*: orange and copper, centre salmon colour, fine deep petals and handsome bud, highly fragrant, a first-rate rose, habit moderate. Introduced in 1871.

**Comtesse Ouvaroff*: salmon-pink, flowers large, full, and well formed; a fine rose. Introduced in 1861.

Comtesse Labarthe: salmon-pink, very pretty, but not full; habit free.

Comtesse Serincourt: creamy-fawn, outer petals tinted with pink, cupped and very beautiful; habit moderate.

Coquette de Lyon: canary-yellow, flowers tolerably full, buds, pretty and clustering, habit moderate. Introduced in 1870.

**David Pradel*: pale rose and lavender, mottled, a peculiar flower, often of an enormous size, habit free and tolerably hardy.

**Devoniensis*: creamy-white, centre sometimes blush; one of the most beautiful roses in cultivation, hardy and vigorous in habit.

Duc de Magenta: pale flesh delicately tinted with fawn, petals large and of a fine waxy substance, flowers large, double, and exquisitely formed, handsome dark foliage and good habit.

**Duchess of Edinburgh*: deep crimson; introduced in 1874 by Messrs. Veitch, and said to be a fine crimson Tea-scented rose.

**Earl of Eldon*: orange-buff, a loose semi-double flower, very attractive, and highly fragrant; a good climbing rose. Introduced by Messrs. Paul and Son, 1871.

**Elise Sauvage*: pale yellow, centre orange, in dry weather very beautiful, but the most tender and delicate of all roses.

**Eugène Desgâches*: pale rose, flowers large and full, often very beautiful, habit free.

Frères Soupert et Notting: yellow bordered with carmine, reverse of petals lilac, a new colour; habit moderate. Introduced in 1870.

**Gloire de Dijon*: buff, with orange centre, very large and double, handsome foliage, a most robust grower and abundant bloomer, very hardy; one of the most superb roses grown.

Gloire de Bordeaux: bright rose, flowers very large and double, a vigorous growing and good climbing rose.

**Goubault*: salmon-pink, deliciously fragrant, beautiful in the bud, habit moderate.

**Homère*: blush, with deeper centre, flowers cupped and double.

**Isabella Sprunt*: fine canary-yellow, flowers moderately well formed; habit free.

Jaune d'Or: fine golden-yellow, flowers full and globular, medium size, moderate habit, beautiful.

**Jean Pernet*: light orange-yellow, outer petals paler, flowers of moderate size and double.

Josephine Malton: creamy-white, very large and fine petal, handsome foliage and good habit; somewhat tender, but a most beautiful rose.

Julie Mansais: white, centre creamy-white, beautiful, large, and full; a beautiful rose for the conservatory, but too tender for the open ground.

Lays: pale yellow, flowers full and well formed; habit moderate.

Laura Fontaine: creamy-white, centre clear fawn, flowers large and moderately well formed, distinct; habit moderate.

**La Boule d'Or*: outer petals pale yellow, centre rich nankeen yellow, flowers globular and very large, with fine broad smooth petals; does not open freely out of doors, but in the conservatory or under glass is very beautiful; habit vigorous.

**La Sylphide*: outer petals cream, tinted with pale carmine, centre fawn, very large and full; a beautiful free blooming rose for outdoor culture.

La Tulipe: creamy-white, tinted with pale carmine, handsome in the bud, but only semi-double, moderate habit. Introduced in 1870.

La Jonquille: jonquil-yellow, a beautiful bright golden-yellow bud, not full, but very pretty; habit moderate. Introduced in 1871.

**L'Enfant Trouvé*: pale yellow, centre orange, large, full, and well formed; a beautiful rose, though much like, if not the same as *Elise Sauvage*.

Léontine Laporte: sulphur and fawn, flowers full, inner petals small; a pretty free flowering rose of vigorous habit.

Le Mont Blanc: palest lemon, long handsome pointed buds, not full enough; a desirable rose for bouquets, habit free. Introduced in 1870.

Le Nankin: coppery-yellow, outer petals paler, large, full, and of tolerably good form.

**Louise de Savoie*: clear pale yellow, very large and full, fine shape, habit vigorous; does not always open freely out of doors, but under glass it is superb.

Ma Capucine: coppery-yellow, flowers of medium size, a seedling from *Ophirie*. Introduced in 1871.

**Madame Barillet Deschamps*: white, centre cream, large, full, and beautifully formed; a most excellent rose under glass.

**Madame Berard*: bright buff or fawn colour with slight salmon tint, flowers very large, full and well formed; a very distinct and superb rose, habit vigorous. Introduced in 1870.

**Madame Bravy*: cream, centre blush, exquisitely formed; in dry weather superb.

**Madame Bremond*: flower varying from clear reddish-purple to dark purple, large and well formed; habit moderate.

**Madame Charles*: deep orange-yellow or apricot; beautiful colour and handsome in bud.

Madame Camille: delicate rose, violet shade, flowers veined, very large and full; a fine rose, habit free. Introduced in 1871.

**Madame Celine Noirey*: salmon-rose, flowers large and double; very beautiful. Introduced in 1868.

**Madame Damaizin*: buff with salmon tint, outer petals cream; a distinct and very beautiful rose, habit vigorous.

**Madame Denis*: waxy-white, centre fawn and flesh, flowers large, full, and cupped; a distinct and very fine rose with a peculiar musk scent. Introduced in 1872.

Madame Docteur Jutte: salmon, orange, and copper, very peculiar colour, flowers rather loose. Introduced in 1872.

**Madame Ducher*: cream flowers, flowers moderate size and full, petals rather pointed and small. Introduced in 1872.

Madame Emilie Dupuy: pale fawn, buds long and handsome, flowers large, full, and tolerably well formed; a good rose. Introduced in 1872.

Madame Hippolyte Jamain: white, centre copper, a novel and peculiar colour.

**Madame de St. Joseph*: fawn shaded with salmon, large and beautiful.

Madame de Vitry: centre bright pink slightly tinted, outer petals paler, full, of good size, and free habit; an excellent hardy rose.

**Madame Falcot*: deep rich orange-yellow, petals large and of good substance, flowers not full, buds exquisitely beautiful, rich dark foliage: habit free.

**Madame Joseph Halphen*: white beautifully tinted with carmine, moderate habit, free blooming; an excellent rose.

**Madame Jules Margottin*: copper and rosy-cerise, centre often deep red; variable, distinct, and very pretty; habit free. Introduced in 1871.

**Madame Levot*: buff centre, shaded salmon, very much resembling *Gloire de Dijon*, flowers large, cupped, and well formed; habit vigorous. Introduced in 1870.

**Madame Marquise de Foucault*: white with yellow centre, large and double.

**Madame Margottin*: rich yellow with salmon-pink centre, full, and of good form, habit vigorous; a superb rose, either for pot culture or out-doors. Introduced in 1866.

**Madame Maurin*: cream and fawn, flowers large, full, and finely formed; a very hardy, vigorous, and beautiful rose.

**Madame Sertot*: white, large, full, well formed, habit moderate.

**Madame Trifle*: pale fawn changing to cream, shape of the flower and habit like *Gloire de Dijon*, flowers somewhat paler, a good rose; habit vigorous. Introduced in 1870.

**Madame Willermoz*: creamy-white, centre tinted with fawn, petals very thick and finely formed, handsome large foliage, and moderately robust habit; a superb rose.

**Madame William*: deep yellow, flowers large and well formed; habit moderate.

**Mademoiselle Antonia Decarli*: superb deep canary-yellow, of medium size, very full and of fine form; this variety is a seedling from *Belle Lyonnaise*, and although belonging to the *Gloire de Dijon* strain, is entirely distinct. Introduced in 1873.

**Mademoiselle Cecile Berthod*: golden-yellow, colour clear and beautiful, flowers cupped, tolerably large and full, distinct habit, free. Introduced in 1871.

**Mademoiselle Françoise Janin*: orange-yellow, sometimes copper in the centre, flowers small. Introduced in 1872.

**Mademoiselle Gabrielle Martel*: copper-yellow shaded with violet-rose, sometimes deep yellow, large, full, and very sweet; a seedling from *Adrienne Christophle*. Introduced in 1873.

Mademoiselle Marie Arnaud: fine canary-yellow, centre deep golden-yellow, large handsome buds and a well formed full flower, very good and highly scented. Introduced in 1872.

Mansais: pinkish-fawn, very large and full; a very beautiful and distinct rose.

Marcelin Roda: pale lemon, centre canary-yellow, flowers good size, globular, and full; a beautiful rose. Introduced in 1872.

Maréchal Bugeaud: bright rose, very large and full; a moderately hardy and very excellent rose.

Marie Van Houtte: white slightly tinted with yellow, border of the petals tinted with rose, flowers quite full and well formed; a good rose, habit moderate. Introduced in 1871.

Marie de Medicis: centre fawn, outer petals mottled with carmine; a good free rose.

**Marie Sisley*: cream, deeply margined and shaded with rosy-salmon, flowers full size and very fragrant; a distinct and good rose, habit free. Introduced in 1868.

**Marie Ducher*: cream and fawn, flowers large, full, and well formed; in shape and form resembling *Gloire de Dijon*; a good rose, habit vigorous.

Marquise de Foucault: white, fawn, and yellow, variable, large and double.

Mirabile: pale yellow, often edged and tinted with rose; pretty, habit moderate.

**Moire*: fawn and rose, very large and full; a superb rose, habit moderate.

Monsieur Furtado: very bright sulphur-yellow, flowers medium size, full and finely formed.

**Montplaisir*: salmon-yellow, large and very full, habit very vigorous: a seedling from *Gloire de Dijon*; a fine rose, and desirable as a climbing or wall rose. Introduced in 1868.

**Narcisse*: fine pale yellow, habit of a *Noisette*; a beautiful abundant blooming rose, moderate in habit, and tolerably hardy.

**Nina*: blush, very free blooming and beautiful, but the flowers a little too loose.

**Niphetos*: white, centre pale straw, long handsome buds, large Magnolia-like petals; in dry weather superb.

**Nisida*: yellow, shaded rose, beautiful and distinct, habit moderate.

Ophelia : clear yellow, of medium size; full and well formed, a very free bloomer. Introduced 1872.

**Pactolus* : lemon, centre pale yellow, habit vigorous; a good and tolerably hardy rose.

**Pauline Labonte* : outer petals flesh tinted with cream, centre deep salmon-buff, very large and full, sometimes peculiarly mottled; a superb and distinct rose.

**Perle de Lyon* : deep fawn and apricot, colour of *Madame Falcot*, petals large, flowers globular, exquisitely formed; a superb rose. Introduced 1872.

Perfection de Montplaisir : clear lemon, form of the flowers similar to the Old Yellow Tea, very pretty, habit moderate. Introduced in 1871.

**President* : salmon and rose, very large and full, resembling *Souvenir d'un Ami*, habit vigorous.

Princess Adelaide : blush-white, globular, very large and full; a fine rose when grown under glass.

Reine du Portugal : golden-yellow, centre shaded with copper, colour variable, very distinct and beautiful, flowers well formed, habit moderate.

Regulus : bright copper and rose; pretty, habit vigorous.

**Rubens* : white, delicately tinted with rose, flowers large and full; a beautiful and well formed flower, habit moderate.

**Safrano* : bright apricot, fine dark foliage, flowers not very double, buds most beautiful; vigorous and tolerably hardy.

Smith's Yellow : lemon, centre yellow, large and very full, a superb rose, but often disfigured by a green centre; only fit for forcing.

**Socrate* : bright salmon and fawn, large and full, habit free; a most distinct and beautiful rose.

**Sombreuil* : pale straw, often pure white, very large and double, most vigorous in habit, and hardy.

**Souvenir de David* : rosy-salmon, fine petal, flowers very large and double; a most deliciously fragrant rose, and very beautiful.

**Souvenir d'Elise* : outer petals cream, centre salmon and fawn, petals large, flowers full and generally perfect, though occasionally producing a hard centre; a most superb rose.

**Souvenir d'un Ami* : salmon and rose, very large and very full, fine handsome foliage; a most superb rose for forcing or out of doors.

**Souvenir de Paul Neron*: white, with rose and buff tint, flowers large, full, and very distinct, a first-rate rose, habit free. Introduced in 1871.

Triomphe de Luxembourg: bronzed-rose, flowers very large and full; a fine rose, habit vigorous.

**Triomphe de Guillot fils*: fawn, beautifully tinted with salmon, large, well formed and full, deliciously fragrant; a handsome, vigorous growing hardy rose.

Tour Bertrand: bright yellow, shaded with buff, flowers large and well formed, habit moderate.

Unique: white ground, flamed with rose and purple, a distinct rose, but delicate. Introduced in 1870.

Fallée de Chamounix: copper, afterwards yellow and rose, very variable, in the way of *Unique*. Introduced 1872.

Victor Pulliat: yellowish-white, large, full and clustering, habit moderate.

**Vicomtesse de Cases*: yellow, centre copperish-yellow, a fine, free-blooming, yellow rose; flowers somewhat loose, delicate in habit, and very tender.

**Yellow*: pale yellow, fine large Magnolia-like petal, with large handsome buds, not double but very beautiful, habit vigorous, though rather tender; a fine rose for a south wall or the conservatory.

THE NOISETTE ROSE. *For pruning see p. 28*

The Old Blush or original Noisette is of American origin; the characteristic properties are its blooming in large clusters, free habit of growth (producing long vigorous shoots), and rich perfume, partaking of the fragrance of the Musk and Tea-scented roses. Many of the varieties raised have been crossed with the Tea-scented, and thereby have become less hardy than the original kind; they are, however, little less valuable on that account, for though not so well suited for standards, they form the finest of roses for south and west walls: many of them have large handsome flowers, highly fragrant, and of vigorous

habit. *Maréchal Niel* may be instanced as being the finest double yellow perpetual blooming rose in cultivation. Some few varieties are of moderate growth, adapted for standards or half-standards.

In pruning the vigorous growers, thin out the small and unripe wood, and shorten the remaining shoots one-third or one-half. *Cloth of Gold* should either be grown against a south wall, or planted out in the conservatory. It should be encouraged to make all the growth possible, when after the first or second year it will commence to bloom.

**Aimée Vibert*: pure white, blooming in large clusters, handsome glossy sub-evergreen foliage; a very pretty rose of free habit; suitable for a standard or a wall.

America: cream with salmon and fawn centre, large and very full, a fine rose, but suitable only for a south wall or the conservatory, as it does not open freely grown as a standard.

Bouquet d'Or: deep yellow, centre copper colour, very large and full; a good climbing rose.

**Celine Forestier*: canary-yellow, outer petals paler; flowers of moderate size, full and well formed, clustering: a distinct and very beautiful rose; an excellent climbing rose for south wall or conservatory. It also makes a good standard.

**Cloth of Gold*: pure yellow, globular, very large and very double, a superb rose, but a shy bloomer and very tender; a fine rose for a south wall or conservatory.

Desprez à fleur jaune: red, buff, and sulphur; variable, very sweet, large and full.

Du Luxembourg: rosy-lilac, centre deep rose, large and double.

Eclair de Jupiter: light crimson, very beautiful and attractive a good pillar rose.

Euphrosyne: pale flesh, tinted with fawn, free blooming, flowers loose; one of the most fragrant of roses, on which account it should be grown.

Fellenberg: bright rosy-crimson, very pretty and showy as a pillar rose, flowers of moderate size and not full.

Isabella Grey: pure deep yellow, colour superb, does not open freely; only fit for the forcing house, or possibly against a south wall in a warm locality.

Jaune Desprez: fawn, pink and fawn centre; a very vigorous grower and a fine wall rose.

Jean Hardy: deep golden-yellow, flowers rather small; a pretty climbing rose for the conservatory or south wall.

**La Biche*: white, centre flesh, very fragrant, a vigorous grower and a good wall rose.

Lamarque Jaune: deep yellow, flowers small, tolerably full and well formed; habit moderate. Introduced 1871.

**Lamarque*: sulphur-white, very large and full; a most beautiful rose for the conservatory or a wall, but too tender to bear a severe winter grown as a standard.

Madame Schultz: centre pale yellow, outer petals straw, flowers full, of moderate size and good substance; a fine rose of vigorous habit.

Madame Caroline Kuster: centre canary-yellow, outer petals pale lemon, flowers large and globular; a very beautiful rose. Introduced 1873.

Marie Accary: creamy-blush, changing to nearly white, somewhat similar to *Acidalie*, flowers small, full, and compact. Introduced 1873.

**Maréchal Niel*: rich brilliant yellow, petals large and smooth, flowers very large, globular, deep, full and exquisitely formed; the most superb of all yellow roses, habit very vigorous. A fine climbing rose for a south wall, for conservatory, or for pot culture.

Marguerite: yellow, bordered with white and shaded with rose, flowers medium size, habit very vigorous.

**Ophiré*: bright salmon and fawn, distinct and peculiar, often very beautiful in the autumn; makes a good weeping or pillar rose.

Rêve d'Or: orange-yellow, flowers moderate size and full; a good climbing rose.

**Solfaterre*: fine sulphur-yellow, superb, large, and very full, habit vigorous; a splendid rose for a south wall as well as the conservatory.

**Triomphe de Rennes*: straw, centre pale yellow, flowers of good size, full, and well formed, having a peculiar fruity scent, habit vigorous; an excellent rose.

**Triomphe de la Ducher*: rose, flowers large and full; an abundant bloomer, and a good pillar or climbing rose.

A SELECT LIST OF ROSES ADAPTED TO VARIOUS CIRCUMSTANCES, SITUATIONS, &c.

- 1.—*Selection of 100 hardy Roses, suitable for growing in the neighbourhood of large manufacturing towns, where much smoke prevails.*

SUMMER ROSES.

French.—*Boula de Nanteuil, *Kean, Ohl.

Hybrid China.—*Brennus, *Chénérolé, *Fulgens, Leopold de Bauffremont, Miss Ingram.

Hybrid Bourbon.—*Charles Lawson, Coupe d'Hébé, Paul Perras.

Damask.—*La Ville de Bruxelles.

Sweet Briar.—*Double Scarlet.

**Scotch Roses*.

**Climbing Roses*, all excepting the Banksian.

Hybrid Perpetual.—*Abel Grand, Alexandrine Bachmeteff, *Alfred Colomb, *Climbing Jules Margottin, *Anna Alexieff, Baronne de Maynard, *Baronne Prévost, Beauty of Waltham, Black Prince, *Boule de Neige, Caroline de Sansal, *Centifolia rosea, *Charles Lefebvre, *Charles Margottin, Crimson Bedder, *Captain Christy, *Comtesse de Chabillant, *Comtesse d'Oxford, *Dr. Andry, Duc de Rohan, Duc de Wellington, Duchess of Norfolk, Duchess of Sutherland, Edward Morren, Exposition de Brie, *Felix Genero, Fisher Holmes, *François Lacharme, Géant des Batailles, *Général Jacqueminot, Jean Rosenkrantz, *Jean Goujon, *John Hopper, *Jules Margottin, Madame Louise Leveque, King's Acre, La Duchesse de Morny, La Reine, Laurent Descourt, Leopold I., *Leopold II., *Lord Raglan, Louise d'Arzens, Madame Nachury, Madame Boutin, *Madame Caillat, *Madame Charles Crapelet, *Madame Clemence Joigneaux, *Madame de Cambacérès, *Madame Hector Jacquin, Madame Julie Daran, *Madame Knorr, Monsieur Pierre Seletzski, Mademoiselle Marie Rady, *Marquise de Castellane, *Maurice Bernardin, Marie Beauman, *Monsieur Boncenne, *Monsieur de Montigny, *Monsieur Paul Neron, *Mrs. Rivers, Nardy Frères, *Pierre Notting, President Willermoz, *Prince Camille de Rohan, Princess Louise Victoria (*Knight*), Paul Verdier, *Sénateur Vaisse, Souvenir de Monsieur Boll, Souvenir de Poiteau, Victor Verdier.

Bourbon.—Apolline, *Baron Gonella, *Baronne de Noirmont, Catherine Guillot, Sir Joseph Paxton.

China.—Cramoisie Superieure, *Mrs. Bosanquet, Old Blush.

**Tea-scented*.—*Cheshunt Hybrid, Climbing Devoniensis, Gloire de Bordeaux, *Gloire de Dijon, Sombreuil.

Noisette.—*Aimée Vibert, *Celina Forestier, Fellenberg, Solfaterre.

For Fifty, take those marked with an asterisk.

For Twenty-four varieties, choose the following:—

Hybrid Bourbon.—Charles Lawson.

Hybrid Perpetual.—Alfred Colomb, Baronne Prévost, Boule de Neige, Centifolia Rosea, Charles Lefebvre, Comtesse Chabillant, Comtesse d'Oxford, Dr. Andry, Général Jacqueminot, John Hopper, Jules Margottin, Lord Raglan, Madame Victor Verdier, Madame de Cambacérès, Madame Knorr, Maurice Bernardin, Monsieur Paul Neron, Mrs. Rivers, Pierre Notting.

China.—Mrs. Bosanquet.

Tea.—Gloire de Dijon.

Noisette.—Celina Forestier.

Bourbon.—Souvenir de la Malmaison.

2.—*Selection of 100 hardy Roses, suitable for the North of England and Scotland, also for cold localities.*

SUMMER ROSES.

Provence.—*Cabbage, De Meaux, *Unique.

Moss.—Baronne de Wassenae, *Crested, *Gloire des Mousseuses, Laneii, *White Bath.

French.—*Boule de Nanteuil, Gloire de Colmar, Kean, *Ohl.

Hybrid China.—Brennus, *Chénédolé, Double Margined Hip, Fulgens.

Hybrid Bourbon.—*Charles Lawson, Coupe d'Hébé, *Paul Ricaut.

Damask.—La Ville de Bruxelles, *Madame Zoutman.

Austrian.—*Harrisonii, *Persian Yellow.

Sweet Briar.—Double Scarlet.

Climbing Roses.—All excepting the Banksian.

PERPETUAL ROSES.

Perpetual Moss.—Général Drouot, Madame Edouard Ory, Perpetual White.

Damask Perpetual.—Crimson Superb.

Hybrid Perpetual.—*Abel Grand, *Alfred Colomb, Anna Alexieff, Antoine Ducher, Baronne Prévost, *Baronne de Maynard, *Black Prince, *Boule de Neige, *Centifolia rosea, *Charles Lefebvre, *Climbing Jules Margottin, *Climbing Victor Verdier, *Comtesse d'Oxford, Crimson Bedder, Charles Rouillard, Colonel de Rougemont, *Comtesse Chabillant, *Dr. Andry, *Dr. Hurta, Duc de Rohan, Duc de Wellington, *Duchesse de Caylus, *Duke of Edinburgh, *Dupuy Jamin, *Edouard Morren, *Exposition de Brie, *Felix Genero, François Lacharme, Géant des Batailles, *Horace Vernet, Jean Goujon, *John Hopper, *Jules Margottin, *King's Acre, Laurent Descourt, Leopold I., Leopold II., *Lord Clyde, Lord Macaulay, Lord Raglan, Madame Boutin, Madame Caillat, *Madame Charles Crapelet, *Madame Charles Wood, Madame Cambacérés, *Madame Knorr, *Madame la Baronne de Rothschild, Madame Victor Verdier, *Marie Rady, Marie Beauman, *Marquise de Castellane, Maurice Bernardin, Monsieur Boncenne, *Monsieur Paul Neron, *Monsieur Etienne Levet, *Mrs. Rivers, Nardy Frères, Paul Verdier, *Pierre Notting, Prince Camille de Rohan, *Sénateur Vaisse, Victor Verdier.

Bourbon.—Baron Gonella, Baronne de Noirmont, *Michael Bonnet, Sir Joseph Paxton.

China.—Archduke Charles, Cramoisie Supérieure, Mrs. Bosanquet.

Tea.—*Gloire de Dijon, Gloire de Bordeaux.

For Fifty of the choicest, take those marked with an asterisk.

For Twenty-four varieties, choose the following:—

Provence.—Old Cabbage.

Moss.—Crested.

Hybrid Bourbon.—Paul Ricaut.

Austrian.—Persian Yellow.

Hybrid Perpetual.—Alfred Colomb, Boule de Neige, Centifolia Rosea, Charles Lefebvre, Comtesse Chabillant, Comtesse d'Oxford, Dr. Andry, Duchesse de Caylus, Horace Vernet, John Hopper, Jules Margottin, Madame Charles Wood, Madame Charles Crapelet, Madame la Baronne de Rothschild, Marie Rady, Mademoiselle Bonnaire, Monsieur Paul Neron, Pierre Notting.

Bourbon.—Michael Bonnet.

Tea.—Gloire de Dijon.

3.—*Selection of 100 of the finest exhibition Roses.*

Hybrid Bourbon.—Paul Ricaut.

Hybrid Perpetual.—*Alice Dureau, *Alfred Colomb, *Annie Laxton, *Antoine Ducher, *Annie Wood, Black Prince, Beauty of Waltham, *Captain Lamure, *Centifolia Rosea, *Charles Lefebvre, Charles Rouillard, *Captain Christy, *Comtesse Chabillant, *Comtesse d'Oxford, Dr. Andry, Duc de Wellington, Duchesse de Caylus, *Duchess of Edinburgh (*Bennett*), Duke of Edinburgh, *Dupuy Jamin, *Duc de Rohan, *Edouard Morren, *Emilie Hausberg, *Elie Morel, Exposition de Brie, Felix Genero, Fisher Holmes, François Lacharme, *Horace Vernet, John Hopper, Jules Margottin, Kleber, La Duchesse de Morny, *La France, Laurent Descourt, *Lælia, Leopold I, Lord Macaulay, *Louis Van Houtte (*Lacharme*), Madame Lacharme, Madame Marie Finger, Madame Chate, *Madame Charles Crapelet, *Madame Charles Wood, Monsieur François Michelin, *Madame de Ridder, Madame Furtado, *Madame George Schwartz, *Madame la Baronne de Rothschild, *Madame Laurent, *Madame Victor Verdier, Madame Vidot, *Mademoiselle Eugénie Verdier, *Marquise de Gibot, *Marquise de Castellane, Maréchal Vaillant, Marie Rady, *Marguerite Dombrain, *Marguerite de St. Amand, *Marie Beaman, Marquise de Montemart, *Monsieur Bonecenne, Monsieur Etienne Levet, *Monsieur François Michelin, *Monsieur Paul Neron, *Monsieur Noman, Monsieur Pierre Selitzski, *Monsieur Woolfield, *Nardy Frères, *Pierre Notting, President Willermoz, *Princess Beatrice, *Prince Camille de Rohan, Reine Daniel, Reynolds Hole, Sénateur Vaise, *Sir Garnet Wolseley, Sophie Coquerelle, Victor Verdier, *Xavier Olibo.

Bourbon.—Michael Bonnet, *Souvenir de la Malmaison.

Tea Scented.—*Adam, Alba Rosea, Catherine Mermet, *Devoniensis, *Gloire de Dijon, Madame Camille, Madame Margottin, *Madame Willermoz, Madame Maurin, Niphetos, *Souvenir d'Elise, *Souvenir d'un Ami.

Noisette.—Celina Forestier, *Maréchal Niel, Solfaterre, *Triomphe de Rennes.

For Fifty of the choicest, take those marked with an asterisk.

For Twenty-four varieties, select the following:—

Hybrid Perpetual.—Alfred Colomb, Alice Dureau, Annie Wood, Captain Christy, Charles Lefebvre, Comtesse Chabillant, Comtesse d'Oxford, Marquise de Castellane, Dupuy Jamin, Edward Morren, Horace Vernet, Emilie Hausberg, Madame Vidot, Marguerite de St. Amand, Marguerite Dombrain, Madame Charles Wood, Madame la Baronne de Rothschild, Madame Victor Verdier, Marie Beauman, Monsieur Paul Neron, Pierre Notting.

Tea-scented.—Gloire de Dijon, Devoniensis.

Noisette.—Maréchal Niel.

4.—*Selection for bedding, grouping, or planting in masses.*

Damask.—Madame Zoutman.

Provence.—Old Cabbage, Unique or White.

Moss.—Common, or Old Moss.

Hybrid China.—Double Margined Hip, Madame Plantier.

Hybrid Bourbon.—Paul Ricaut.

Austrian.—Harrisonii, Persian Yellow.

Sweet Briar.—Double Scarlet.

Perpetual Scotch.—Stanwell Perpetual.

Damask Perpetual.—Crimson Superb.

Hybrid Perpetual.—Abel Grand, Alfred Colomb, Boule de Neige, Centifolia Rosea, Charles Lefebvre, Colonel de Rougemont, Comtesse Cecile Chabillant, Comte Bobinsky, Comtesse d'Oxford, Crimson Bedder, Dr. Andry, Duke of Edinburgh, Dupuy Jamin, Etienne Levet, Fisher Holmes, François Michelin, Géant des Batailles,

Général Jacqueminot, John Hopper, Jules Margottin, La France, Louisa Wood, Madame Charles Crapelet, Madame Knorr, Marguerite de St.Amand, Monsieur Noman, Mademoiselle Bonnaire, Mrs. Rivers, Marquise de Castellane, Monsieur Paul Neron, Pierre Notting, Prince Camille de Rohan, Sénateur Vaisse, Souvenir de Charles Montault, Victor Verdier.

Bourbon.—Michael Bonnet, Queen, Souvenir de la Malmaison.

China.—Cramoisie Supérieure, Mrs. Bosanquet, Old White.

Noisette.—Aimée Vibert, Celina Forestier, Triomphe de Rennes.

For beds of Roses of brilliant and decided colours, select from the following kinds:—

Brilliant Crimson.

Géant des Batailles, Général Jacqueminot, Madame Victor Verdier, Sénateur Vaisse, Souvenir de Charles Montault; China, Cramoisie Supérieure.

Dark Crimson.

Charles Lefebvre, Capitaine Lamure, Duke of Edinburgh, Horace Vernet.

Light Crimson.

Edouard Morren, Madame George Schwartz, Madame Charles Crapelet, Madame Charles Wood, Jules Margottin.

Carmine.

Alfred Colomb, Dupuy Jamin, Comtesse d'Oxford, Monsieur Etienne Levet, Richard Wallace, Sir Garnet Wolseley.

Dark Purplish Crimson.

Louis Van Houtte (*Lacharme*), Monsieur Boncenne, Pierre Notting, Prince Camille de Rohan.

Deep Rose.

Annie Laxton, Marquise de Castellane, Marie Rady, Marie Beauman, Monsieur Furtado.

Pale Rose.

André Dunand, Comtesse Cécile Chabillant, Charles Rouillard, Lyonnais, Madame Marie Finger.

Rosy Pink.

Centifolia Rosea, La France, Madame Lefebvre Bernard, Marguerite de St. Amand, Monsieur Noman.

Pure White.

Baronne de Maynard, Boule de Neige, Aimée Vibert, White China, Clara Sylvain; Tea, Niphetos.

Blush White.

Bessie Johnson, Captain Christy, Madame Lacharme, Mademoiselle Bonnaire, Marquise de Montemart, Reine Blanche, Souvenir de la Malmaison.

Pale Flesh.

Mademoiselle Eugène Verdier, Madame Rothschild, Princess Louise Victoria; China, Mrs. Bosanquet; Tea, Devoniensis.

Deep Yellow.

Persian Yellow, Cloth of Gold, Maréchal Niel; Tea, Mademoiselle Cécile Berthod, Madame Margottin, Madame Falcot, Reine de Portugal, Perle de Lyon.

Pale Yellow.

Celina Forestier, Rêve d'Or, Solfaterre, Triomphe de Rennes; Tea, Belle Lyonnaise, Gloire de Dijon, La Boule d'Or, Louise de Savoie; Narcisse.

5.—*Selection of the best Climbing Roses for a south or east wall.*

Banksian.—White and Yellow.

Bourbon.—Acidalie.

Tea Scented.—Belle Lyonnaise, Climbing Devoniensis, Gloire de Bordeaux, Gloire de Dijon, Homère, Madame Berard, Madame Falcot, Madame Levet, Madame Trifle, Safrano, Sombreuil.

Noisette.—Aimée Vibert, America, Celina Forestier, Cloth of Gold, Earl of Eldon, Jaune Desprez, Lamarque, Maréchal Niel, Montplaisir, Ophirie, Rêve d'Or, Solfaterre, Triomphe de Rennes.

For a west or north wall, or for open trellis work.

Hybrid China.—Blairii No. 2, Chénédolé, Double Margined Hip, Fulgens, Leopold de Bauffremont, Madame Plantier, Magna Rosea.

Hybrid Bourbon: Charles Lawson, Coupe d'Hébé, Juno.

Ayrshire.—Bennett's Seedling, Ruga, Multiflora Alba, Laura Davoust.

Evergreen.—Banksiaeflora.

Bourbon.—Acidalie, Sir Joseph Paxton.

Tea Scented.—Gloire de Bordeaux, Gloire de Dijon, Madame Levet, Madame Trifle, Sombreuil.

Noisette.—Aimée Vibert, Celina Forestier, Fellenberg, Solfaterre.

Hybrid Perpetual.—Anna Alexieff, Baronne Prevost, Boule de Neige, Climbing Victor Verdier, Climbing Jules Margottin, Duchess of Sutherland, Duke of Edinburgh, Edward Morren, General Jacqueminot, Jules Margottin, Maréchal Vaillant, Monsieur Boncenne, Monsieur Paul Neron, Pierre Notting, Paul Verdier, Prince Camille de Rohan, Princess Louise Victoria, Reine Blanche.

6.—*Selection of the finest Pillar or Pole Roses.*

Moss.—Luxembourg, Lancii.

French.—Boule de Nanteuil, Kean, Ohl.

Hybrid China.—Blairii No. 2, Brennus, Chénédolé, Fulgens, Leopold de Bauffremont, Madame Plantier, Magna Rosea.

Hybrid Bourbon.—Charles Lawson, Coupe d'Hébé, Juno.

Austrian.—Harrisonii, Persian Yellow.

Damask.—La Ville de Bruxelles.

Hybrid Perpetual.—Anna Alexieff, Baronne Prévost, Boule de Neige, Centifolia Rosea, Caroline de Sansal, Climbing Jules Margottin, Climbing Victor Verdier, Duke of Edinburgh, Edward Morren, Eugène Appert, Général Jacqueminot, Jean Goujon, Jules Margottin, Lord Raglan, Madame Clemence Joigneaux, Madame de Cambacères, Madame Knorr, Maréchal Vaillant, Monsieur Woolfield, Monsieur Boncenne, Monsieur Paul Neron, Paul Verdier, Pierre Notting, Prince Camille de Rohan, Princess Louise Victoria, Souvenir de Monsieur Boll, Reine Blanche.

Bourbon.—Acidalie, Apolline, Baron Gonella, Baronne de Noirmont, Sir Joseph Paxton.

Tea-scented.—Gloire de Dijon, Gloire de Bordeaux, Madame Levet, Madame Trifle.

Noisette.—Aimée Vibert, America, Celina Forestier, Eclair de Jupiter, Fellenberg, Jaune Desprez, La Biche, Montplaisir, Ophirie, Rêve d'Or, Solfaterre.

7.—*Selection of the best Weeping Roses.*

Hybrid China.—Blairii No. 2, Fulgens.

Austrian.—Harrisonii.

Ayrshire.—Bennett's Seedling, Ruga.

Multiflora.—Laura Davoust, Félicité Perpetuée, The Garland.

Evergreen.—Banksiaeflora.

Boursault.—Weeping.

Bourbon.—Apolline.

Tea.—Gloire de Dijon.

Noisette.—La Biche, Madame Schultz, Ophirie, Solfaterre.

8.—*Six best Yellow Roses.*

Austrian.—Persian Yellow.

Noisette.—Cloth of Gold, Solfaterre, Maréchal Niel.

Tea-scented.—Madame Margottin, Perle de Lyon.

9.—*Six best White Roses.*

Provence.—Unique.

Hybrid Provence.—Princess Clementine.

Hybrid Perpetual.—Boule de Neige, Baronne de Maynard.

Bourbon.—Acidalie.

Tea-scented.—Niphetos.

10.—*Six of the best Crimson Roses.*

Hybrid Perpetual.—Alfred Colomb, Charles Lefebvre, Duke of Edinburgh, Monsieur Etienne Levet, Sénateur Vaisse, Sir Garnet Wolseley.

11.—*Six of the finest Dark Roses.*

Hybrid Perpetual.—Baronne Bonstetten, Baronne Chauraud, Louise Van Houtte (*Lacharme*), Monsieur Boncenne, Prince Camille de Rohan, Pierre Notting.

12.—*Selection of the finest Roses for pot culture.*

Provence.—Cabbage.

Moss.—*Common or Old, Gloire des Mousseuses, Laneii.

Hybrid China.—Blairii, Chénédolé, Leopold de Bauffremont.

Hybrid Bourbon.—*Charles Lawson, *Juno, *Paul Ricaut.

Hybrid Perpetual.—*Alfred Colomb, Alice Dureau, Annie Laxton, Auguste Rigotard, *Baronnie de Maynard, *Beauty of Waltham, *Boule de Neige, Capitaine Lamure, Captain Christy, *Centifolia rosea, *Charles Lefebvre, *Charles Rouillard, Comte de Nanteuil, *Comtesse Chabillant, Comtesse d'Oxford, Devienne Lamy, *Dr. Andry, *Duchesse de Caylus, *Duke of Edinburgh, Edouard Morren, Exposition de Brie, Felix Genero, *General Jacqueminot, Henry Pages, *Horace Vernet, Jeanne Gros, Jean Rosenkrantz, *John Hopper, *Jules Margottin, King's Acre, La France, Lælia, Leopold II., Louisa Wood, Louis Van Houtte, Lyonnaise, Madame Charles Crapelet, Madame Clemence Joigneaux, Madame de Ridder, Madame George Schwartz, Madame Guillot de Mont Favet, Madame Knorr, *Madame La Baronne de Rothschild, Madame Marie Finger, Madame Thérèse Levet, *Madame Victor Verdier, *Mademoiselle Marie Rady, Mademoiselle Eugène Verdier, Marie Beauman, Marquise de Castellane, Marquise de Gibot, *Marquise de Montemart, Miss Ingram, *Monsieur Etienne Levet, *Monsieur Noman, Monsieur Woolfield, Monsieur Paul Neron, Nardy Frères, *Paul Verdier, *Pierre Notting, President Thiers, Reine Blanche, Reine du Midi, Richard Wallace, *Sénateur Vaisse.

Bourbon.—*Madame Joseph Guyet, *Michael Bonnet, *Souvenir de la Malmaison.

China.—Archduke Charles, *Cramoisie Superieure, Marjolin, *Mrs. Bosanquet.

Tea-scented.—*Adam, *Alba rosea, Climbing Devoniensis, Belle Lyonnaise, Catherine Mermet, Comte de Paris, Comtesse de Nadaillac, *Devoniensis, Eugène Desgaches, *Gloire de Dijon, La Boule d'Or, *Louise de Savoie, *Madame Bravy, *Madame Céline Noirey, Madame Camille, *Madame Falcot, *Madame Margottin, *Madame Willermoz, Madame Sertot, Mademoiselle Cecile Berthod, Marie Van Houtte, *Marie Ducher, *Niphotos, Perfection de Montplaisir, Perle de Lyon, *President, Rubens, *Safrano, *Sombreuil, *Souvenir d'Elise, Souvenir de Paul Neron, *Souvenir d'un Ami, Vicomtesse de Cazes.

Noisette. — *Celina Forestier, La Marque, Madame Caroline Kuster, *Maréchal Niel, Triomphe de Rennes.

Where only a small collection is required, choose those marked with an asterisk.

13.—*Selection of the finest Roses for forcing.*

Provence.—Cabbage.

Moss.—Common, Gloire des Mousseuses, Laneii.

Hybrid Bourbon.—Charles Lawson, Juno, Paul Ricaut.

Damask Perpetual.—Crimson Superb.

Hybrid Perpetual.—Annie Laxton, Baronne Prévost, Beauty of Waltham, Boule de Neige, Capitaine Lamure, Caroline de Sansal, Charles Rouillard, Comte de Nanteuil, Comtesse Cécile de Chabillant, Comtesse d'Oxford, Duke of Edinburgh, Edouard Morren, Géant des Batailles, Général Jacqueminot, Henry Pages, Jules Margottin, King's Acre, La France, La Reine, Leopold II., Lord Raglan, Lyonnaise, Madame Charles Verdier, Madame de Cambacérès, Madame Knorr, Marquise de Castellane, Monsieur Noman, Monsieur Paul Neron, Reine du Midi, Sophie Coquerelle, Victor Verdier.

Bourbon.—Michael Bonnet, Souvenir de la Malmaison.

China.—Cramoisie Supérieure.

Tea-scented.—Alba rosea, Catherine Mermet, Devoniensis, Gloire de Dijon, La Boule d'Or, Louise de Savoie, Madame Barillet Deschamps, Madame Camille, Madame Margottin, Madame Maurin, Madame Sertot, Madame Willermoz, Mademoiselle Cécile Berthod, Marie Van Houtte, Niphetos, Smith's Yellow, Sombreuil, Souvenir d'Elise, Souvenir d'un Ami, Souvenir de Paul Neron.

Noisette.—America, Isabella Grey, Lamarque, Maréchal Niel, Solfaterre.

14.—*Thirty-six of the finest Roses for growing as specimens, in pots for exhibition.*

Hybrid Bourbon.—Charles Lawson, Paul Ricaut.

Hybrid Perpetual.—Alfred Colomb, Captain Christy, Charles Lefebvre, Charles Rouillard, Comtesse Chabillant, Comtesse d'Oxford, Duchesse de Caylus, Duke of Edinburgh, Dupuy Jamin,

Edouard Morren, Horace Vernet, Jules Margottin, La France, Lælia, Louis Van Houtte, Madame la Baronne de Rothschild, Madame Victor Verdier, Marguerite de St. Amand, Mademoiselle Marguerite Dombrain, Marie Beauman, Monsieur Paul Neron, Monsieur Woolfield, Paul Verdier, Pierre Notting, Prince Camille de Rohan, Victor Verdier.

Bourbon.—Souvenir de la Malmaison.

Tea Scented.—Alba rosea, Devoniensis, Gloire de Dijon, Madame Willermoz, Souvenir d'un Ami.

Noisette.—Céline Forestier, Maréchal Niel.

15.—*Very highly scented Roses.*

Moss.—Old Moss, Banksian White.

Hybrid Perpetual.—Adolphe Brongniart, Alice Dureau, Boule de Neige, Baronne Louise Uxkull, Beauty of Waltham, Charles Lefebvre, Comtesse Cécile de Chabillant, Camille Bernardin, Charles Margottin, Elizabeth Vigneron, Felix Genero, Géant des Batailles, La France, L'Esperance, Louis Van Houtte (*Lacharme*), Madame Fillion, Madame Marie Cirodde, Madame Moreau, Madame Furtado, Madame Knorr, Marie Beauman, Pitord, Souvenir de Poiteau, Sénateur Vaisse, Souvenir de Charles Montault.

Bourbon.—Baronne de Noirmont.

Damask Perpetual.—Crimson (Du Roi.)

Tea.—Climbing Devoniensis, Devoniensis, Goubault, Madame Margottin, Souvenir d'un Ami, Socrate, Sombreuil.

Noisette.—Euphrosyne, Maréchal Niel.

CALENDAR OF OPERATIONS.

JANUARY.—Presuming the necessary protection has been properly applied to all the tender varieties, there will be little to fear now from the effects of frost. It is requisite that every rose plant should receive a good dressing of manure at least once a year; advantage should therefore be taken of hard frost to have it wheeled on and spread over the surface, and during open weather let it be forked in. I usually prepare for this purpose (a month or two before it is required) a large heap, consisting of horse dung and pig dung, to this is added a few hundred-weight of half-inch bones, burnt earth, and any decayed vegetable matter at hand. About four or five spadefuls of this are put to each plant, and for the rose beds it is spread about an inch thick over the surface. Any spare time may be advantageously employed in preparing labels, and going over the stock, and renewing such as are obliterated.

FEBRUARY.—Proceed with pruning all the most hardy summer blooming kinds, commencing with the French, Moss, Alba, and Provence, and finishing with the Hybrid China and Hybrid Bourbon. Let all planting be completed whenever the weather is favourable; it should never be delayed beyond the middle of March, for no plant suffers more than the rose from late planting. Fork in manure, and take off close to the stem every root sucker as this operation proceeds. Where any plant is observed to be in an unhealthy condition, let it be taken up, the old soil

removed, and replace with fresh loam and manure. Examine and trim the roots, and carefully remove all the suckers before replanting.

MARCH.—If the summer blooming roses have been pruned as directed last month, proceed at once with the Hybrid Perpetuals, Bourbons, and the hardiest of the Noisettes. The moderate and even free growing Hybrid Perpetuals will require rather close pruning, and the dwarf varieties in this class must be cut down hard, the closer the better, provided a good eye is secured. There are many varieties in this class which have an erect habit of growth, the shoots being crowded together, and the blooms only seen at the top of the plant. A little assistance, by tying out the branches, will be necessary to make such assume a more branching appearance, and by this means handsomely formed heads, of a good size, may be obtained of all the compact growing kinds. Pillar Roses should be pruned into a pyramidal form. Commence by training up one strong shoot, and keep the side branches pruned in. Attend to plants in pots, and have them trained to the form desired as they are growing. Look well after grubs, and fumigate to destroy green fly.

APRIL.—Tea-scented and China Roses may now be pruned: let the whole of this work be dispatched as soon as possible. See that the beds are properly forked and dressed. Mulch newly planted roses; a little short straw, hay, or manure put upon the surface of the soil will effect this object. Evapora-

tion during hot and dry weather being thus prevented, the growth of the plant is encouraged, and possibly the loss of those not well rooted prevented. Should the weather be dry, give a good watering; this, if done effectually where the plants are mulched, will not soon require repeating. Bear in mind, one thorough good watering is more beneficial than frequent small doses. Beds may now be prepared for planting the Tea-scented, China, and Bourbon Roses, grown upon their own roots. Choose for these a warm, dry situation: let the soil be prepared at least eighteen inches deep; it should consist of one half good rotten turfy loam, the other half equal proportions of leaf mould, rotten manure, and sharp sand. Plant, when the weather is suitable, towards the middle or end of the month, but let the plants be previously well hardened under a north border; protect them also for a week or two after planting, by placing a few branches of evergreens amongst them.

MAY.—The plants will now be making considerable progress, and every opportunity should be embraced to examine and regulate the shoots, as well as to search for and destroy insects. The advantage of planting in open and airy situations will now be apparent. In such places the plants will be nearly free, or suffer very little from the attacks of green-fly, whereas those in confined situations will require almost daily attention to keep them free from this pest. Disbudding is an important operation, and can be performed whilst examining the plants for

insects. Remove the small shoots where the heads are too much crowded, leaving the strong and vigorous shoots which are growing in a proper direction. By attending carefully to this point, additional strength is given to the plants, and the size and quality of the blooms are much improved, besides which the necessity of "thinning" at the time of pruning is lessened. Fumigate plants in greenhouses and frames to keep down green fly, and where mildew appears apply flour of sulphur. If this proves ineffectual, try Fowler's Insecticide, using from two to two and a half ounces to the gallon; let the plants be syringed or otherwise well wetted with the mixture, and in a few hours afterwards syringe the plants over with clear water. Where the least sign of insect is observed upon the trees against walls, syringe frequently at night or morning. In favourable situations, towards the end of the month, many of the wall plants will be gay with flowers. Remove all suckers from the wild stock as they appear.

JUNE.—The directions given last month for the destruction of insects must be strictly attended to throughout the present. The neglect of these precautions for only a few days may lead to the injury of many of the finest blooms. See that each plant is properly disbudded as previously directed; also tie out the shoots of the compact and upright growing varieties, where they are too much crowded. Where large blooms are desired, a few of the smaller buds should be thinned out with a pair of sharp

pointed scissors. Tie standard plants firmly to their stakes ; a high wind at this time would do injury to any not properly secured. Water recently planted beds of the Tea-scented and Chinese varieties, and all late planted roses, should the weather be dry. Manure-water may be applied to established plants with good effect, particularly to those from which blooms are required for exhibition. Plants which were budded last summer will now be making vigorous shoots ; these must be carefully tied up as they grow, otherwise the first gust of wind will blow them out. Suckers will be numerous ; always take them off close to the stock.

JULY.—The greater portion of the plants will now be in full bloom, and if the needful attention has been given to pruning a few of the hardiest varieties in the autumn, and others again early and late in the spring, a succession of bloom will be kept up until the Perpetuals commence their second flowering, by which means a continuous bloom may be had from June till November. A stroll through the rose garden at this season is delightful in the extreme, more especially early in the morning, when every bloom is fresh with dew and untarnished by the sun's rays. Those who have devoted time, labour, and attention to their plants will now derive the greater pleasure, and more fully appreciate their beauty. Now is the time to take notes, describing not only the flowers, but the habit and character of all new varieties. This will be found most useful at pruning time. If any plants are observed with

insufficient bloom, try to ascertain the cause; with some sorts this may occur through improper pruning. Note down the result produced by different manures where applied by way of experiment. Many of the high coloured and dwarf-growing Bourbon Roses bloom very indifferently during the hot summer months, the colours are faint and the quality of the bloom inferior, but towards the latter part of the summer and in early autumn these are the most beautiful. It is well therefore to deprive them, or at least a part of them, of their summer bloom; the plants will then be strong, and produce an earlier and finer autumnal bloom. Gather the faded flowers daily, and whilst doing so observe if any of them are infested with insects. Where it is desired to save seed, leave the earliest blooms for that purpose. Give a top-dressing of manure to the Perpetuals when the first bloom is over, and water occasionally with weak liquid manure.

AUGUST.—This is the best month for budding; commence with those sorts which have made the earliest growth and have well matured shoots. Let the stocks be kept in a healthy growing state; never bud from a scion that is not firm and well ripened; tie with cotton, and let the ligature be loosened in about three weeks after budding.

SEPTEMBER.—Let all budding be completed as soon as possible. Loosen the ligature of those already done before it cuts into the bark, and attend to the removal of suckers, &c. This is the best month

for budding upon the Manetti stock. Towards the end of the month, cuttings of all hardy roses may be put in under hand-glasses. Choose a north border under a hedge or wall; let the cuttings be put in about four inches deep, and the soil pressed firmly round them. Water once or twice with clear lime water, which will keep the worms from disturbing the cuttings. Tender roses in pots should now be put into the greenhouse, or otherwise protected from heavy rains. Continue to apply sulphur or Fowler's Insecticide where mildew is observed, or it will very soon destroy the foliage and bloom.

OCTOBER.—Examine the stock of plants, and note those to be replaced or removed for others next month. What purchases are intended to be made, either in new or old varieties, should be determined as soon as possible, as the strongest plants are always sold out early in the season; and unless good robust plants are procured, there is little chance of having fine blooms the first season of planting. Have in readiness a quantity of loam, rotten manure, burnt weeds and sand. When alterations are contemplated, or a new rosary is to be formed, let the ground be prepared this month; if at all wet it must in the first place be drained, and afterwards trenched to the depth of eighteen inches or two feet, throwing the soil into ridges. Select and take up from the open ground, for potting, a few well formed dwarf plants of good varieties; cut them back rather hard, then place them in a cold frame where they may remain, give air and water as required; these

plants without being forced will come into bloom towards May and the early part of June.

NOVEMBER.—Having made the selection required, proceed with planting whenever the soil is sufficiently dry, and by no means let it be done when the soil is wet or heavy; it is better to let the plants remain in by the heels for a month or two than do this. See to the directions given for soil and planting. Remove any plant that is sickly or that does not appear to thrive properly; examine the roots and trim them; take out all the old soil and replant in fresh soil and a small quantity of manure. Ill health may arise from various causes, such as deep planting, sour soil, too much manure, or unhealthy stock: in the latter case it would be better to throw the plant away and replace it with another. Briars for budding next season may be procured and planted this month.

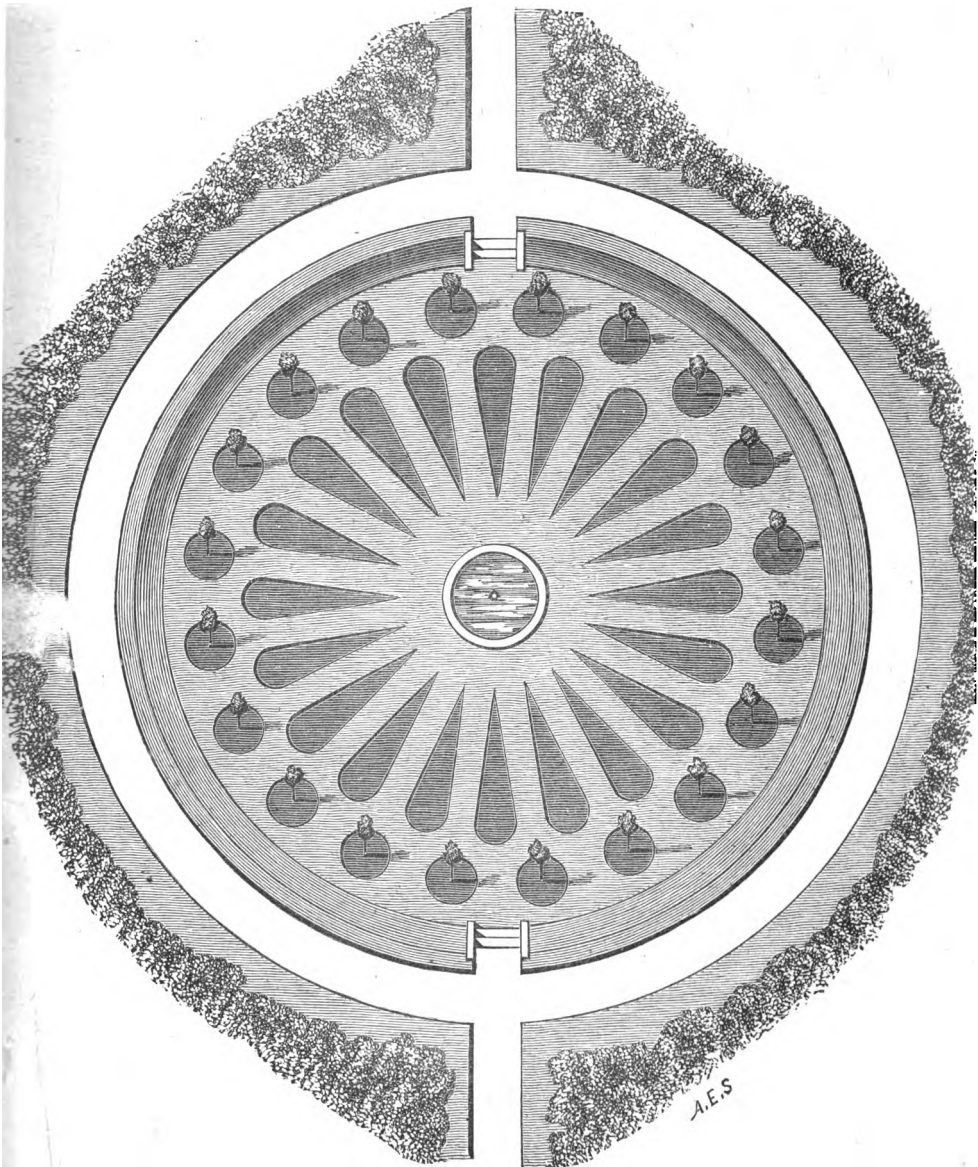
DECEMBER.—Let the necessary materials for protecting the tender varieties be prepared and had in readiness to apply the moment that frost has fairly set in. The severe winter of 1861 proved so destructive to the tender roses where no protection was applied that every precaution should in future be taken to avoid a similar occurrence. If the weather continues open and dry, finish planting if possible, otherwise let it be deferred until February. Have the standards which are planted properly staked, that they may not be moved by the wind. Mulching should also be applied to newly planted roses. It is better to put it on the surface now than in spring.

DESIGNS FOR ROSARIUMS.

These plans have been designed specially for Rose Gardens. Several of them were laid out and planted last year, and are very greatly admired.

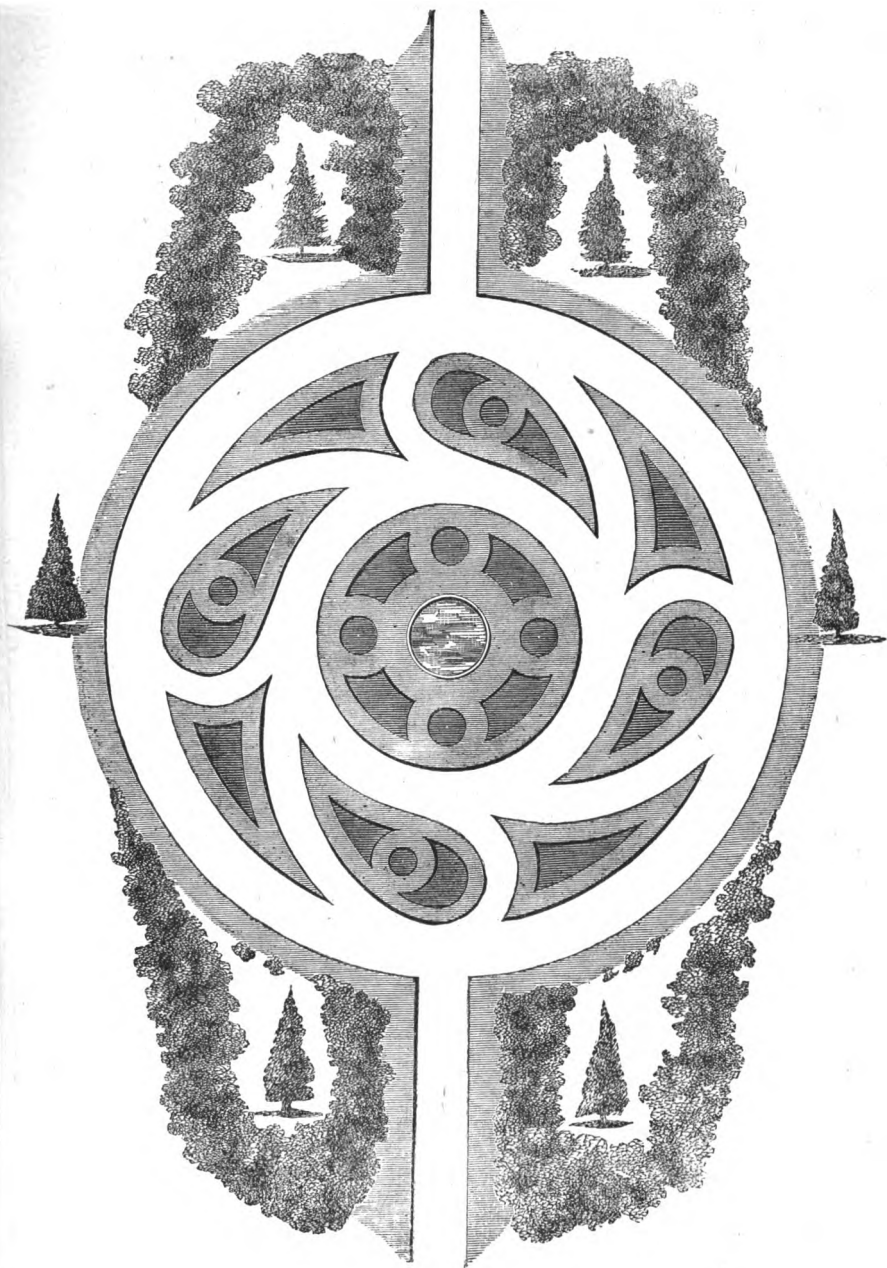
The belts of evergreen and specimen conifer trees are introduced both for shelter and ornament, and during the winter and spring months add much to the beauty of the Rosarium.

ROSARIUM No. 1.

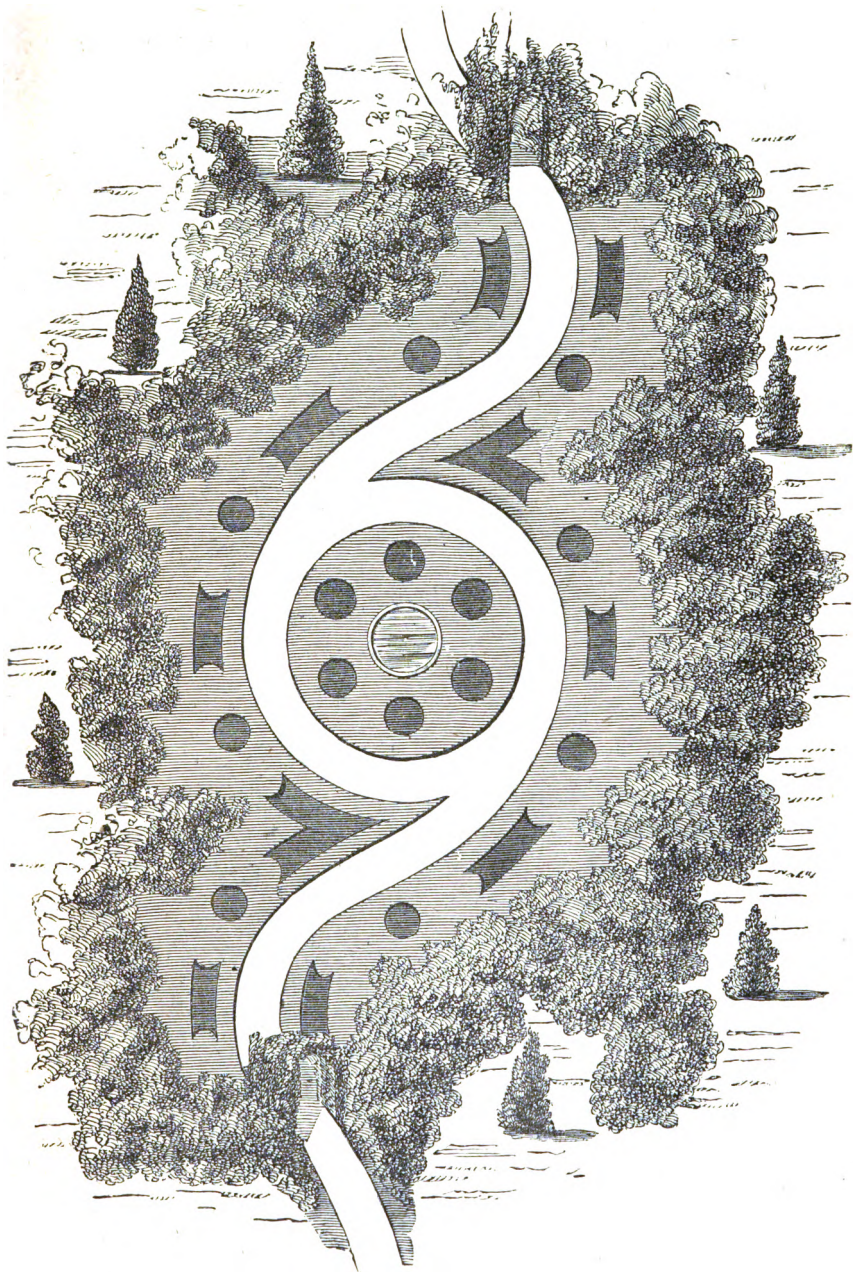


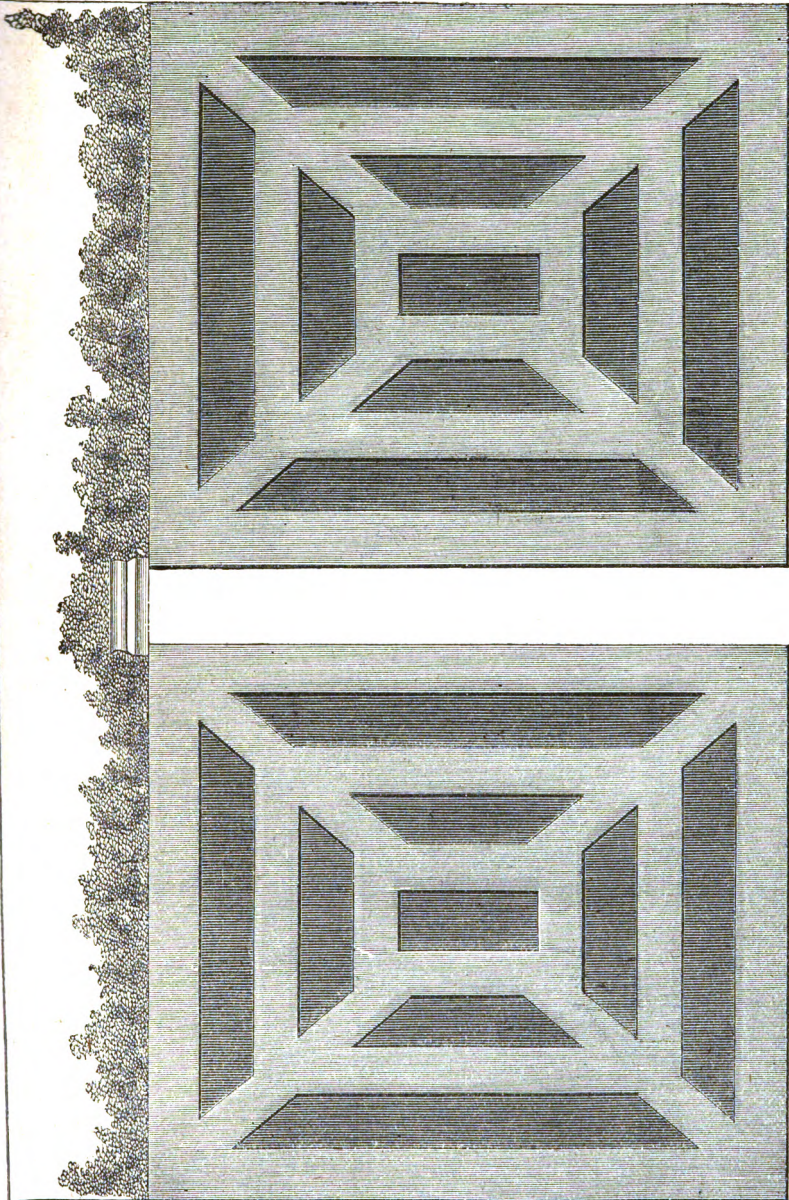
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ROSARIUM No. 2.



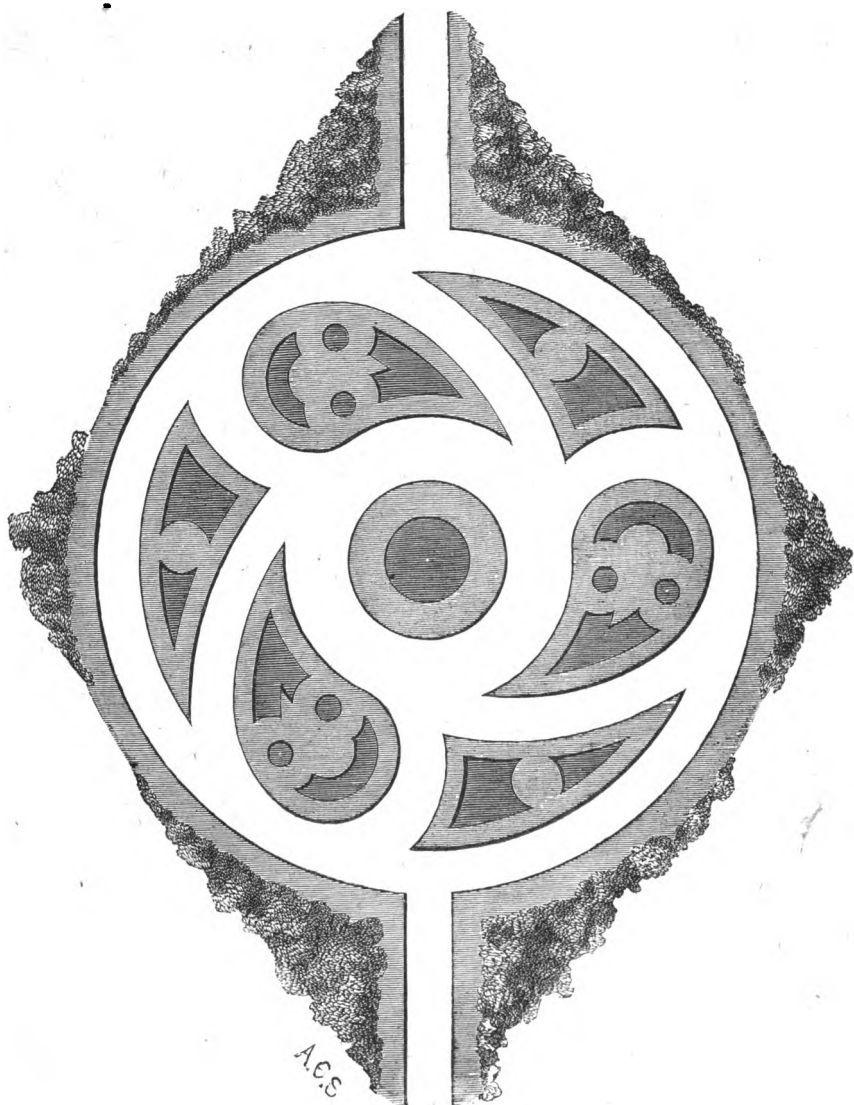
ROSARIUM No. 3.



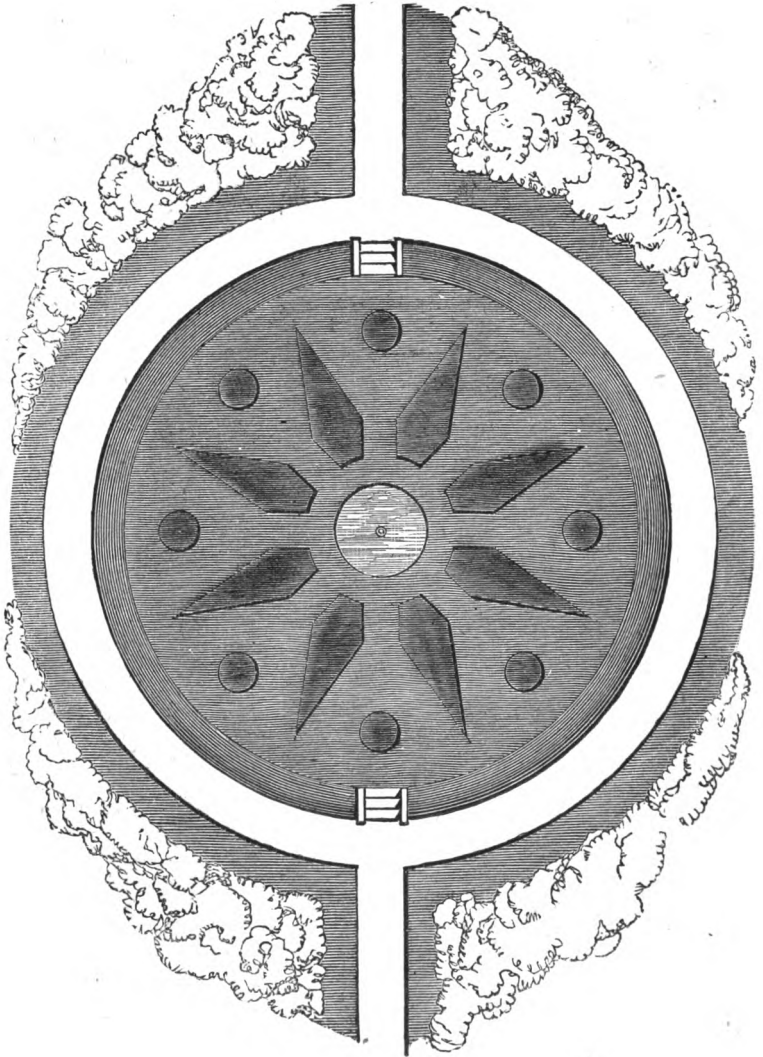


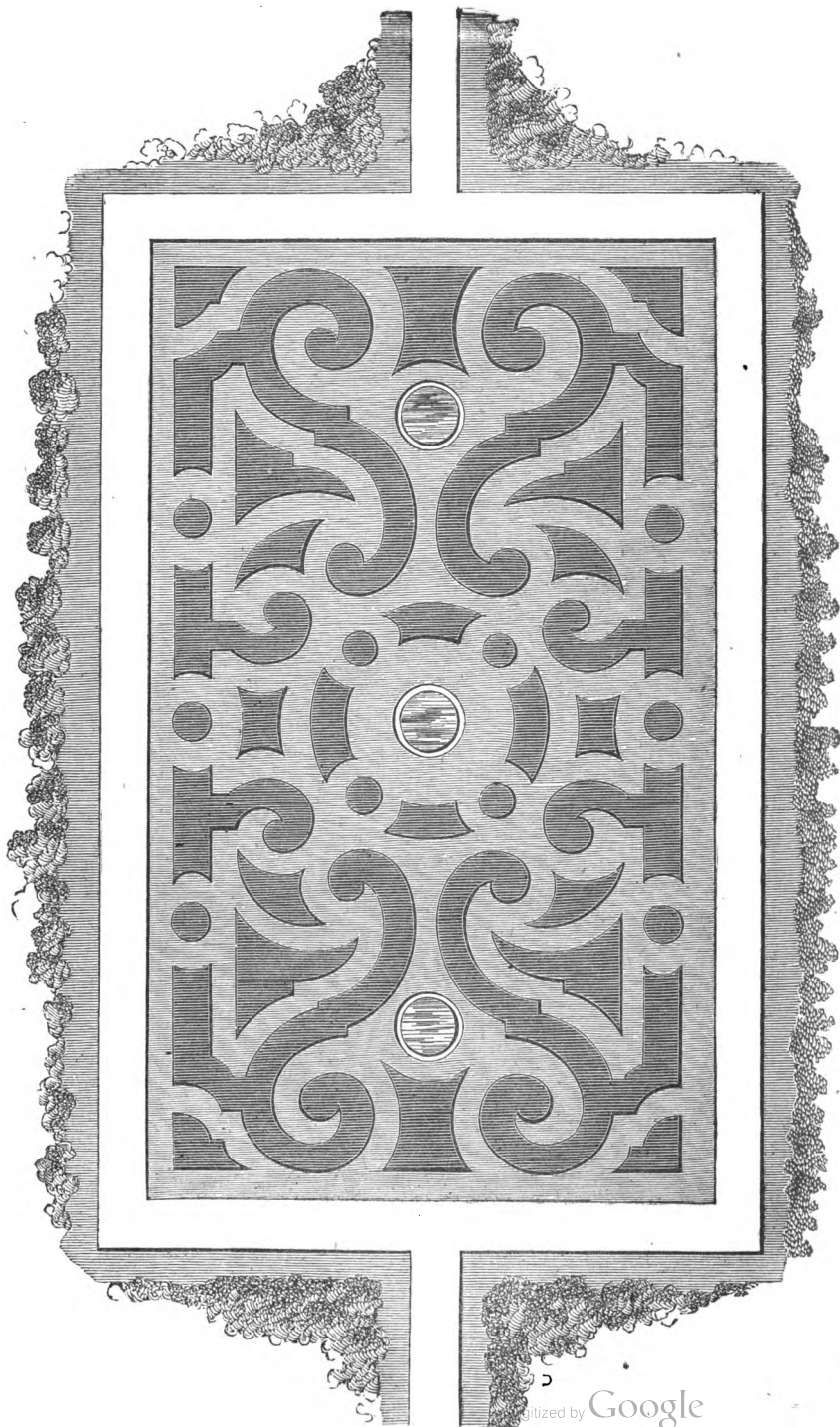
A.E.S.

ROSARIUM No. 5.



ROSARIUM No. 6.





Genealogical Record 1880

Marion M. M. 103

Jean Leventhal, p 92

For a 1890

Madam Leventhal p 100

Dr. Jean Leventhal p 90

Genealogical Record p 85

Born. 1800 from drawings, p. 42
And stone at the bottom p. 44

In the Garden are.

Glazin de Bizon

Genl. Jacquemont

Sonnet et Notting (Mrs) perpetual

Gravel Mrs (Summer)

Mr James Wolcott

